ADVANCING STUDENT MORAL DEVELOPMENT: USING HUMAN-CENTERED DESIGN AND TEACHER-LED ACTION RESEARCH TO SUPPORT DESIGN-AND-DEVELOPMENT RESEARCH IN K-12 PUBLIC SCHOOLS

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Abstract

In this study teachers collaboratively developed a model that depicts how moral education can be integrated into curriculum and instruction. This intervention was necessary because of the lack of guidance for teachers on how to bring moral education into their classrooms. While most public school districts in Allegheny County emphasize moral development in their strategic statements, the vast majority of the pre-service programs that prepare those teachers provide no instruction related to moral education. Due to this lack of training, teachers feel unprepared to advance their students' moral development, despite believing that it is their responsibility to do so. During this program teachers participated in professional development in which they examined research and literature related to moral education, moral development, and moral psychology. Teachers were also introduced to human-centered design philosophy and methods prior to conducting action research, and a model was created that illustrates how moral education can be integrated into curriculum and instruction.

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Chapter 1: Executive Summary

Instructional strategies can positively influence both moral reasoning and empathetic dispositions. While these strategies have been shown to be effective under controlled conditions, most teachers receive little to no training on these strategies, or on how they can be adapted for use in dynamic and complex classroom environments. Although teachers are doing their best to advance their students' moral development, there is an opportunity for them to gain expertise in this area and make an even greater difference. To do this, teachers must acquire the knowledge and skills necessary to integrate moral education into curriculum and instruction.

Background

When it comes to student moral development, there is a striking disconnect between what K-12 public school districts say is important, on the one hand, and the training future teachers receive in their pre-service programs, on the other. Many districts place greater emphasis on moral development than cognitive development. Consider, for example, the following mission statement:

> Duquesne City Schools will prepare our students to be successful, ethical, caring members of a global community. We will provide experiences and opportunities that foster academic success. We will support emotional and ethical growth. We will develop a sense of community.
>
> (Duquesne City School District, 2014)

In Western Pennsylvania, three-quarters of the 42 public school districts supported by the Allegheny Intermediate Unit emphasize student moral development in their strategic statements (e.g., visions and missions). However, 80% of the colleges and universities

that prepare the teachers who work in those districts provide no instruction on anything having to do with moral education, moral development, or moral psychology. Speaking of his pre-service experience, a teacher certified through the University of Pittsburgh said, "There really wasn't anything I can think of about moral development of students… there were some things about ethical teaching practices, but nothing about helping students become more ethical or empathetic." This confirmed an analysis of University of Pittsburgh course descriptions, and was indicative of most teachers' experiences at their respective universities.

Purpose

This study sought to explore how teachers might integrate moral education into curriculum and instruction.

Methodology

Teachers were asked to help bridge the gap between moral education theory and practice. The study was grounded in a participatory worldview, which places emphasis on change, collaboration, and participation (Creswell & Clark, 2011). Two core questions examined in this study were a) How can teachers integrate moral education into curriculum and instruction? and b) How can teachers actively participate in Design and Development Research?

In this study, teachers attended a professional development workshop where they examined moral education from multiple perspectives (i.e., philosophical, historical, socio-cultural, economic, and psychological). They also examined the neuroscience behind moral decision-making along with research dealing with Ethics of Principles and Ethics of Care. Finally, participants learned about strategies that have proven to be

effective in positively influencing both moral reasoning and empathetic dispositions. Considering this research, along with their own experiences, they then developed action research plans and put those plans to the test in their classrooms. Afterwards, the teachers worked together to develop a model that depicts how moral education can be integrated into curriculum and instruction. They supported each component of the model by citing a) professional and personal experiences, b) research and literature, and c) action research findings.

Implications

This study extends upon existing research and literature in a number of ways. The needs assessment revealed a disconnect between teacher pre-service preparation and public school district expectations in regards to student moral development. This study also showed that coupling professional development with action research is an effective way to compel teachers to use what they learn during professional development inside their classrooms, and that purposeful teacher-led action research may be preferable to the more open-ended action research that is encouraged in literature (see, for example, Nolan & Hoover, 2004). Additionally, the professional development workshop serves as an example of how research and literature having to do with moral development, moral education, and moral psychology can be translated into teacher-friendly language and made accessible to practitioners. Finally, this study gave practitioners a voice in determining how to bridge the gap between moral education research and practice, and scholars doing work in this area may find the teachers' perspectives useful.

Chapter 2: Advancing Moral Development

During an interview for this study's needs assessment, a teacher talked about his experiences teaching in a school where, the day before, 20 students were stabbed by one of their classmates. The teacher concluded by saying that efforts to advance student moral development will help prevent those kinds of incidents. Because everything we do has moral implications, the moral basis of an action is easy to forget (Rorty, 2012), although tragedies seem to help us remember that morality matters. When working with the educators participating in this study, the efforts described below were not framed as a potential solution to a problem of practice, or as a kind of silver bullet that will help prevent tragedies like the one mentioned above. Literature on change management, building off research on positive psychology (Peterson, 2009; Peterson, 2013; Seligman, Steen, Park, & Peterson, 2005), advocates a shift away from this mentality (Block, 2008; Cooperrider & Whitney, 2005). Placing emphasis on strengths and positive potential has been linked to a number of real world outcomes, including improved follower performance, behaviors, and attitudes (Avey, Reichard, Luthans, & Mhatre, 2011). So, instead of focusing on moral shortcomings, we might step back and appreciate the moral feats of our students, and then envision a world where those feats are multiplied (see Cooperrider & Whitney, 2005).

Is crime worse now than it was a generation ago? Are today's youth less moral than yesterday's? Does it matter? Kohlberg (1977) and Dewey (2004) believed that schools have a responsibility to advance student moral development, and a school bloodbath was not necessary for them to come to this conclusion. Maybe it is enough to say that kids, who have plenty of goodness in them, have the potential for even more.

And teachers, who have their hearts in the right places and are doing commendable things to advance their students' moral development, still have a thing or two to learn. When it comes to student morality, there are plenty of strengths to build upon that teachers see in their classrooms everyday. And those teachers have more than a few strengths of their own. The strategies discussed in this paper are not the answer to a moral crisis that we may or may not be in. Rather, they are a means for teachers, who are already doing what they can for their students' moral development, to gain expertise on moral education so that they can help their students, who are already pretty good, become even better.

The content examined in this chapter was translated into teacher-friendly language and discussed with teachers during a professional development workshop. During that workshop, moral education was examined from multiple perspectives, which provided teachers with a framework within which content having to do with moral decision-making and moral development could be more easily understood. Implications of the examined research and literature were also discussed. The relationship among topics is outlined in following table.

Table 2.1

Relationship Among Topics

Topic	Moral Reasoning	Empathetic Dispositions
Philosophical Perspective	Consequentialism	Virtue Ethics Deontology
Historical Perspective	*Moral Philosophy:* Mills; *Moral Education:* Kohlberg's cognitive approach	*Moral Philosophy:* Aristotle, Kant; *Moral Education:* Values clarification; character education
Socio-Cultural Perspective	Socio-economic impact on moral reasoning	n/a
Economic Perspective	Connection between economic decision-making and moral decision-making; results-oriented professional development	Results-oriented professional development
Psychological Perspective	Instructional design with an emphasis on constructivism	Instructional design with an emphasis on constructivism
Moral Psychology / Moral Education	Ethics of Principles	Ethics of Care
Moral Psychology / Neuroscience	Cognitive moral judgments	Automatic emotional moral judgments
Key Associated Brain Region(s)	DLPFC	vmPFC Amygdala
Implications for Educators	Socratic questioning Reflection	Modeling Appropriate feedback Real world application Reflection

(continued)

Topic	Moral Reasoning	Empathetic Dispositions
Brain Targeted Teaching Connections	Brain Target (BT)-4: Effort after meaning; desirable difficulties BT-5: Open-ended questions; reflection	BT-1: Caring environment BT-2: Reflection BT-5: Open-ended questions; reflection BT-6: Providing feedback; performance assessments
Danielson Framework (Connections with Implications)	3b: Using questioning and discussion techniques 3c: Engaging students in learning 3e: Demonstrating flexibility and responsiveness	2a: Creating an environment of respect and rapport 2d: Managing student behavior
Danielson Framework (Connections with Voluntary Professional Development)	4a: Reflecting on teaching 4d: Participating in a professional community 4e: Growing and developing professionally 4f: Showing professionalism	

The reason for examining moral education from multiple perspectives and discussing a wide variety of instructional implications may be better understood after considering research on human-centered design and creative expertise, to be discussed in Chapter 4. This research shows that novice and expert designers usually hold to their initial design idea as long as they can, despite problems that may arise along the way (Ball, 1990; Cross, 2004). Because of this tendency to fixate on initial designs, teachers were exposed to a broad array of research and potential instructional implications before they developed their initial action research plans.

Below, moral education is examined from multiple perspectives. Efficacy is addressed, which segues into a discussion of the neuroscience behind moral decision-making and dual process theory. Next, a connection is made between dual process theory

and Ethics of Principles and Ethics of Care. Finally, instructional implications are introduced, and special considerations and limitations are addressed.

Moral Education from Multiple Perspectives

Before examining moral education research and theory, it may be worthwhile to provide a framework within which this subject can be approached. Moral education can be examined from a number of different perspectives, including the philosophical perspective (Aristotle, trans. 1998; Kant, trans. 1998; Mill, 1861/1998), historical perspective (McClellan, 1992), socio-cultural perspective (Downey, Hippel, & Broh, 2004; Gamoran & Long, 2006), economic perspective (Frank & Bernanke, 2004; Shenhav & Green, 2010), and psychological perspective (Ertmer & Newby, 1993; Narvaez, 2010).

Universal Principles: A Philosophical Perspective

The foundation for modern ethics was laid around 2500 years ago when Socrates used the dialectic method to help others question their pre-existing beliefs and use their reason to determine what ought to be done (Matson, 2000). Plato (trans. 1998), one of his students, went on to argue that just knowing about the good would make you virtuous. But it was one of Plato's students, Aristotle (trans. 1998), who brought ethics down from the heavens and made it an object of practical study (Matson, 2000). Virtue ethics, the ethical approach that stemmed from Aristotle's ideas, places emphasis on an individual's character. Deontological ethics instead emphasizes intention and action over consequences, prescribing that individuals have a duty to follow rules that can be universalized (Kant, trans. 1998). It holds that the ends will never justify the means (Kant, trans. 1998). Consequentialism, on the other hand, emphasizes consequences over

the intent of the action or the action itself (McElwee, 2010). Consequentialism prescribes that individuals have a moral obligation to bring about the best consequences they can, regardless of how they get there. With consequentialism, the ends do justify the means. Utilitarianism, as described by Mill (1861/1998), is one form of consequentialism, and prescribes that individuals should act to bring about the greatest amount of happiness possible.

Greene (2014), a prominent moral psychologist whose work will be discussed later in this chapter, argues that, given neuroscience findings, consequentialism is best suited to guide moral decision making. Other moral psychologists, such as Narvaez, would likely interpret neuroscience findings differently in favor of approaches more aligned with virtue ethics (see, for example, Narvaez & Lapsley, 2012; Narvaez & Vaydich, 2008). Although the tension between consequentialism and deontological ethics parallels, to an extent, the tension between reasoned and emotional moral responses, when it comes to moral education these types of moral philosophical distinctions have been historically insignificant. However, it will be worthwhile for teachers to have a basic understanding of how moral education relates to moral philosophy, as illustrated below.

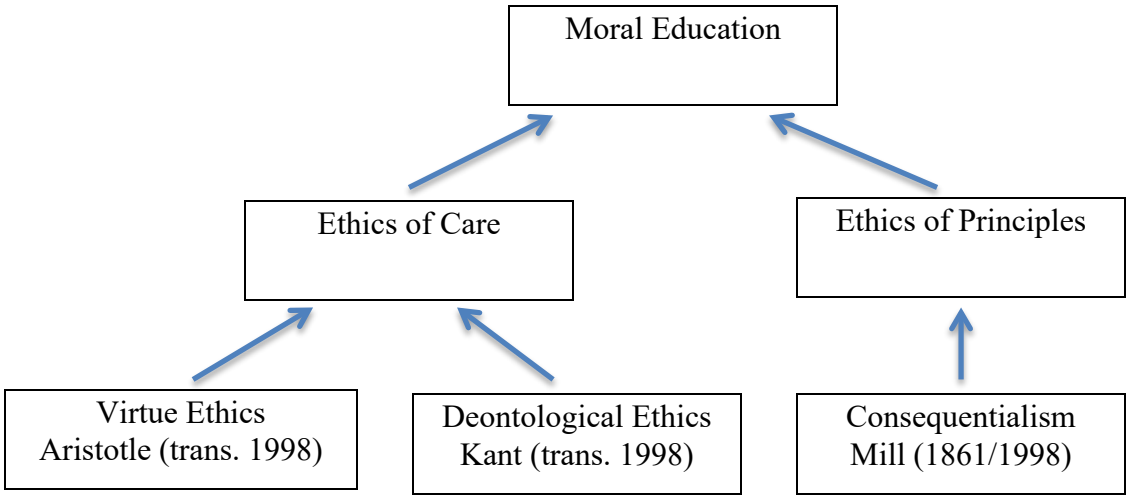


Figure 2.1. Moral education foundation. Although deontological ethics and consequentialism are, in theory, ethical approaches based on principles, neuroscience findings discussed later in this chapter support the connections depicted above.

Philosophers have recently placed emphasis on one's ability to universalize maxims, which means that the reasoning used to justify an action should be able to be applied at all times (Kant, trans. 1998; Rawls, 1999). Kohlberg (1975), an influential figure in moral development research and theory, followed in this tradition. Kohlberg (1963/2008) also followed in the footsteps of Piaget (1972/2008), who advanced the idea that individuals progress through distinct stages of development. This study is grounded in Dewey's (2004) belief that schools are responsible for fulfilling obligations formerly left up to parents and community. Kohlberg (1975) agreed with Dewey about the aim of education and the role schools should play in moral development, although Dewey's direct influence on Kohlberg is questionable (Bergman, 2006). Dewey (1894) also believed that children should be made to see the effect their actions have on others, which

is an implication of Ethics of Care that will be discussed later in this chapter (Noddings, 2010).

Moral Education in America: A Historical Perspective

Just as teachers will hopefully benefit from learning about moral philosophy, these teachers may also benefit from having a basic understanding of the history of moral education. Moral education has had a prominent place in schools in America since before the Revolutionary War. Students initially went to school not to learn reading and arithmetic, but rather right from wrong (McClellan, 1992). As the years went by moral education was emphasized to a greater or lesser extent but remained an essential component of a student's educational experience well into the 20th Century, when an atmosphere that fostered moral development inside classrooms was lost (McClellan, 1992).

In 1647 Massachusetts passed the first law mandating schools, and the primary aim of these schools was to provide children with a moral education based on Puritan beliefs (Popkewitz, 2011). Following the Civil War the conceptualization of moral education shifted as parents witnessed their children moving further away, and at younger ages, than ever before. These parents felt the need to give their children a solid moral education to prepare them for the temptations of the world, and schools were expected to aid in this preparation (McClellan, 1992). Moral education formed the nucleus of schools until the 1890s, when it was seriously challenged for the first time as educators began to feel the need to bolster academics to prepare students for a more modern society (McClellan, 1992). A decade later other challenges to moral education arose as rules and values for work, home, and community began to seriously diverge (McClellan, 1992).

The responses to these challenges included character education programs, a progressive approach to moral education, and a religious-centered approach to moral education (McClellan, 1992). In the 1940s and 1950s, moral education's place in schools began to decline as greater emphasis was placed on academics and more Americans came to believe that religion and morals were private matters. This gradual decline accelerated in the 1960s, when racial division and an unpopular war resulted in Americans adopting views consistent with ethical relativism. Other factors that contributed to this erosion were increased ethnic diversity, the growth of urban areas, increased social mobility, and feminism (Soujourner, 2012). A significant increase in litigation involving schools also played a role in accelerating moral education's decline. Misunderstandings about court decisions in cases involving church-and-state and cases involving children's rights dramatically increased educators' fears of litigation. While there was no active effort to force moral education out of schools, during this time an environment that supported moral education inside classrooms was lost (McClellan, 1992).

Afterwards, moral education began making a comeback along three main avenues. Values clarification sought to help students define their values, rather than adopt a specific set of them, but was criticized for promoting ethical relativism (McClellan, 1992). A competing approach, devised by Lawrence Kohlberg (2008/1963), emphasized cognitive stages of moral development. This approach emphasized the moral reasoning individuals use when confronted with ethical dilemmas (Kohlberg & Peters, 1975). Finally, character education programs promoted basic virtues and were a reaction to the amorality of schools, but were criticized as being a form of conservative political indoctrination (McClellan, 1992).

Our K-12 educational system is still recovering from the collapse, in the 1960s and 1970s, of an educational environment that supported moral education. A possible reason the recovery is proceeding so slowly is that the purpose of education is now narrowly defined from an economic perspective that places heavy emphasis on results and accountability (Mehta, 2013a), which may make integration of moral education appear less important than it was when the purpose of education was more broadly defined. While most school districts in Allegheny County emphasize moral development in their strategic statements, these districts do little, if anything, about moral education in practice. A hodgepodge of programs adopted in response to issues that society at large at one time or another has deemed to be important, from drugs to bullying, has more to do with using schools to address societal ills than it does with providing students with what can be called a moral education (see Tyack & Cuban, 1995 for a discussion of using schools to address societal problems). Furthermore, teachers are unprepared to advance their students' moral development. Four-fifths of the teachers from one public school district in Western Pennsylvania, for example, received no training on moral development during their pre-service programs. This lack of training has not deterred teachers from doing what they can to advance their students' moral development, although this lack of training suggests why some of the well-intentioned things teachers do in their classrooms run counter to research, as will be discussed in the next chapter. Although moral education was an integral part of schooling for much of American history, it does not follow that it should have been, or that it should have a place in today's classrooms. Public school districts in Western Pennsylvania, however, have

made the determination that moral education has a place in schools, as will be discussed in Chapter 3.

Environmental Impact on Moral Development: A Socio-Cultural Perspective

If moral education is to return to classrooms, it is worthwhile to consider potential external constraints that may limit the effectiveness of efforts in this direction. Schools play an important role in reducing or worsening inequalities, and research suggests student socio-economic backgrounds will have an impact on moral reasoning ability prior to instruction (Downey, Hippel, & Broh, 2004). These findings are supported by ethnographic research that showed that poor and working-class children struggle, in comparison with their middle-class peers, with the type of Socratic questioning that can be used to advance student moral reasoning (Lareau, 2011). These differences can be attributed to different parenting approaches, with poor and working-class parents communicating primarily through short, clear directives, as compared to middle-class parents engaging in back-and-forth dialogues with their children. This research suggests that middle-class students' moral reasoning will initially be more advanced than poor and working-class students', due in part to language use in homes. Other research also supports the notion that language matters when it comes to moral decision-making. For example, research shows that considering moral dilemmas in a second language has an impact on moral judgments (Costa, Foucart, Hayakawa, Aparici, Apesteguia, Heafner, & Keysar, 2014).

Research dealing with academic achievement gaps suggests that integrating moral education into schooling will not eliminate gaps in moral development that are a result of socio-economic conditions (Downey et al., 2004; Gamoran & Long, 2006). This research

also suggests that student moral development will advance at roughly the same rate during instruction, regardless of socio-economic conditions; and that it is unlikely deficiencies in moral development that are due to socioeconomic conditions will be overcome through in-school efforts (Downey et al., 2004; Gamoran & Long, 2006). Finally, these findings suggest that moral education will contribute to advancing moral development for all students (Downey et al., 2004; Gamoran & Long, 2006), which is a focus of this study.

Emphasis on Results: An Economic Perspective

With these external factors in mind, how can students' moral development be advanced? The economic perspective is useful when considering this question because of the perspective's emphasis on real-world results (see Frank & Bernanke, 2004). The economic perspective is not only relevant when dealing with monetary concerns. Even when looked at through a narrow lens, economics provides a useful perspective on how moral decisions are made, since brain processes that involve complex moral decision-making parallel brain processes that involve economic decision-making (Shenhav & Green, 2010). Economics also compels us to consider the characteristics of professional development that best prepare teachers to advance student moral development, as discussed later in Chapter 4. An emphasis on real world results also informed the selection of the psychological perspective, as discussed below.

Instructional Design and Expertise: A Psychological Perspective

The psychological perspective helps us consider the instructional implications, inferred from research and theory, which are most likely to obtain real world results. This perspective also helps us consider what expertise means in this context.

Instructional design. The instructional design perspective holds that behaviorism, cognitivism, and constructivism are each potentially appropriate, depending on both the learner's level of mastery and the difficulty of the learning task (Ertmer & Newby, 1993). The instructional design perspective takes the topographical perspective (Alexander, Schallert, & Reynolds, 2009), and specifically pinpoints where on the topographical landscape of learning behaviorism, cognitivism, and constructivism fall. It also highlights when each is most appropriate to use in practice.

For this study the instructional design perspective is the most appropriate perspective for a number of reasons. First, integrating moral education into existing curriculum in order to advance student moral development is a difficult instructional problem that requires knowledge of a wide variety of best teaching practices and strategies, along with an understanding of the underlying learning theories (Ertmer & Newby, 1993). Second, when dealing with a difficult instructional problem, it is important to know when and why each of the learning theories is most appropriate to use (Ertmer & Newby, 1993). Third, it is important to understand how the learning theories relate to one another, and how specific strategies are appropriate for specific situations (Ertmer & Newby, 1993). Finally, an understanding of all of the above will increase the likelihood of successfully implementing research-based instructional strategies in practice (Ertmer & Newby, 1993).

The instructional design perspective is ideally suited to bridging the gap between research and practice, as illustrated below.

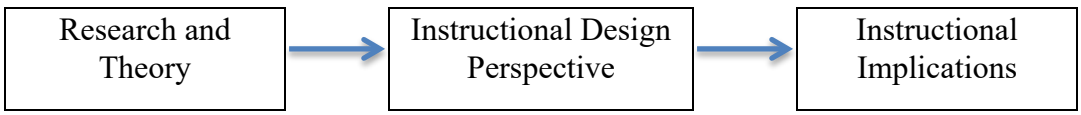


Figure 2.2. The instructional design perspective can help bridge the gap between research and instruction.

There are also interesting parallels between this psychological perspective and the design philosophy that was emphasized throughout this intervention, and which will be discussed in Chapter 4.

Expertise. Similar to the way in which the instructional design perspective bridges the gap between theory and practice, experts must be able to employ their knowledge in actual situations. Expertise can be defined as an in-depth understanding that informs practice and action (Narvaez, 2010). For this study, teachers worked collaboratively to gain expertise in the area of moral education. In conjunction with and as a consequence of this process, teachers acquired a significant amount of content knowledge about moral education and related disciplines, and they worked with colleagues to apply that knowledge in a variety of contexts (Bransford et al., 2000). As teachers worked to acquire expertise on moral education, they likely also acquired additional moral expertise, which means that they are now better able to apply "the right virtue in the right amount in the right way at the right time" (Narvaez & Bock, 2014, p. 5). Philosophers are extremely hesitant to classify anyone as a moral expert (Archard, 2011; Cholbi, 2007; Gesang, 2010). Some psychologists, on the other hand, do not have a problem doing so (Narvaez, 2010). The purpose of this study was not to help teachers become moral experts. Rather, the purpose was to help them gain expertise in the area of moral education.

Teachers' Attitudes and Beliefs

As teachers gain expertise in the area of moral education, their attitudes and beliefs will change. Teacher efficacy, which predicts student outcomes to a greater extent than any other school-level variable, has to do with teachers' attitudes and beliefs regarding the influence teachers can have on student outcomes (JohnBull, Hardiman, & Rinne, 2013). It is grounded in Bandura's (1986) social cognitive theory (Cayci, 2011). Teacher self-efficacy, which has to do with a teacher's belief in her own ability to impact student outcomes, is positively related to a number of student outcomes, including achievement, motivation, and student self-efficacy (Ashton, Webb, & Doda, 1983; Cayci, 2011). It is also negatively related to moral disengagement and student misbehavior (Bandura & Barbaranelli, 1996; Cayci, 2011).

A positive relationship exists between teacher self-efficacy and instructional quality (Holzberger, Philipp, & Kunter, 2013), caring classroom environments (Ashton et al., 1983), caring teacher behaviors (Collier, 2005), teacher collaboration (Ashton et al., 1983; Collie, Shapka, & Perry, 2012), teachers' attitude toward teaching (Cayci, 2011), teacher job satisfaction (Høigaard, Giske, & Sundsli, 2012; Klassen, 2010), pro-social behavior (Bandura, Caprara, Barbaranelli, Gerbino, & Pastorelli, 2003), self-regulation (Bandura et al., 2003), and high-quality professional development (Chong & Kong, 2012). Each of these factors may, either directly or indirectly, positively influence student moral development.

Affective Domain Taxonomy

Krathwohl's Affective Domain Taxonomy (University of Connecticut, 2014) provides a framework that can be used to help teachers internalize the idea that they are

capable of positively influncing their students' moral development, which relates to self-efficacy (JohnBull et al., 2013). The five stages of the taxonomy have varying degrees of relevance for this study.

Receiving. Receiving is the lowest stage of internalization. In its simplest state this is when an individual has an awareness of something's existence (University of Connecticut, 2014). Teachers have an awareness that children develop morally; this was made clear during interviews for this study's needs assessment. Most teachers interviewed, however, did not have more than a basic understanding of moral development.

Responding. Responding has to do with individuals showing, in some way, at least a bit of interest in the subject (University of Connecticut, 2014). Teachers voluntarily chose to participate in this study, and there were no external incentives. As such, all participants showed an interest in the subject prior to the start of professional development.

Valuing. Valuing has to do with the value individuals attach to a subject. At this stage not only do individuals internalize the value, but their actions should also be reflective of this belief (University of Connecticut, 2014). Based on interviews conducted for the needs assessment, teachers genuinely believe that moral development is important and that schools have a responsibility to advance it. These ideas were reinforced during the professional development workshop. At this stage helping teachers better understand brain plasticity may increase their general and self-efficacy (see Dubinsky, 2010; Hardiman, 2012; Siegel & Bryson, 2011).

Organization. Organization has to do with integrating the subject into a consistent internal value system (University of Connecticut, 2014). Although teachers value the idea of advancing their students' moral development, the needs assessment for this study showed that they lack confidence in their personal abilities to advance it, which relates to self-efficacy. To a lesser extent, some teachers expressed a lack of confidence, during interviews, in teachers' abilities to positively influence the moral development of all students, which relates to general efficacy. Teachers must be convinced that all students can potentially advance morally and that they, personally, have the knowledge and skills necessary to advance their students' moral development. At this stage it will be important to emphasize connections between moral development and cognitive development, and make connections with other initiatives, so that teachers can see how these efforts fit within a larger framework.

Characterization. Characterization is the highest stage of internalization and occurs when an individual consistently acts according to an internalized belief (University of Connecticut, 2014). Teachers will reach this stage of internalization when they not only believe that they can advance their students' moral development, but also take action to do so by integrating instructional strategies in their classrooms. Because instructional strategies were implemented at the teachers' discretion, it was important that they internalized a belief that student moral development can be advanced. It was also important that teachers acquired the necessary knowledge and skills to positively influence their students' moral development and that they had an internalized desire to do so.

The Neuroscience Behind Moral Decision Making

Having an understanding of the neuroscience behind moral decision-making helped teachers participating in this study as they worked to gain expertise as moral educators. This also helped teachers internalize a belief that student moral development can be advanced and that they, personally, can positively influence it.

Brain Structure and Function Related to Moral Decision Making

In this study, participating teachers examined the science behind human morality in order to better understand what it means to be moral (Greene, 2003). There is no specific region of the brain that deals with moral judgment (Shenhav & Greene, 2010). Instead, brain structure and function related to moral decision-making involve a complex interrelationship among several structures: the medial frontal gyrus, which integrates emotions into planning and decision-making; the posterior cingulate, precuneus, and retrosplenial cortex, which integrate emotion, memory, and imagery; the superior temporal sulcus and inferior parietal lobe, which support representation of socially significant movements; the orbitofrontal/ventromedial frontal cortex, which represent the punishment and reward value of behavior; the temporal pole, which imparts affective tone to memory and experience; the amygdala, which rapidly assesses punishment and reward values; and the dorsolateral prefrontal cortex and prefrontal lobe, which deal with working memory (Greene & Haidt, 2002, pp. 520-521). Of these, the medial orbitofrontal cortex, temporal pole, and superior temporal sulcus have received particular emphasis in the past (Moll, Oliveira-Souza, Bramati, & Grafman, 2001).

More recently, three areas of the brain have risen to the forefront of moral psychological neuroscience research. The amygdala plays an important role in determining automatic moral judgments (Greene, 2014; Shenhav & Greene, 2014). The

ventromedial prefrontal cortex (vmPFC) has direct connections to the amygdala and also plays a role in determining these automatic responses (Greene, 2014). Additionally, the vmPFC plays an important role in making comprehensive moral judgments, which are made when there is a conflict between reason and emotion (Shenhav & Greene, 2014). The dorsolateral prefrontal cortex (DLPFC), which is activated when an individual applies a conscious decision-making rule, also plays an essential role in moral decision-making (Cushman, Murray, Gordon-McKeon, Wharton, Greene, 2011; Paxton & Greene, 2010). While emphasis was not placed on any of these specific brain regions or brain functions during teacher professional development, having a basic understanding of discoveries having to do with plasticity and neurogenesis (see Hardiman, 2012), along with knowledge of moral decision-making and moral development that will be discussed below, reinforced teachers' existing beliefs, which were voiced during interviews for this study's needs assessment, that student moral development can be advanced in school.

Head vs. Heart: Dual-Process Theory of Moral Judgment

Kohlberg's work placed a heavy emphasis on the role of reasoning in moral decision-making (Kohlberg & Hersh, 1977; Kohlberg & Peters, 1975; Kohlberg, 1975). Gilligan (1977), however, argued that men and women make moral decisions differently. Even though current research findings indicate that men and women do not significantly differ in how they make moral judgments (Derryberry, Wilson, Snyder, Norman, & Barger, 2005; Kish-Gephart, Harrison, Trevino, 2010), Gilligan played an important role in advancing the idea that there is an emotional side to moral decision-making.

Neuroscience has now shown that, when it comes to moral decision-making, both reason and emotions are important (Cushman & Greene, 2012; Cushman et al, 2011;

Greene, 2014; Greene, Nystrom, Engell, Darley, & Cohen, 2004; Paxton, Bruni, & Greene, 2012; Paxton & Greene, 2010). Although brain processes are integrated to an extent, when making moral judgments the emotional and cognitive areas of the brain compete (Cushman & Greene, 2012). Dual-process theory of moral judgment holds that automatic emotional responses and conscious reasoning both influence moral judgments (Greene, 2014). Activation of the amygdala and vmPFC, which are associated with automatic emotional responses to moral dilemmas, leads to deontological moral judgments (Greene, 2014). As previously discussed, these judgments emphasize action and intent over consequences. On the other hand, activation of the DLPFC, which is associated with conscious reasoning, leads to consequentialist moral judgments (Greene, 2014). This distinction is important because it provides support for approaching moral education from two distinct directions.

A large body of evidence supports dual-process theory (Cushman & Greene, 2012; Cushman et al, 2011; Greene, 2014; Greene et al., 2004; Paxton et al., 2012; Paxton & Greene, 2010). Generally, individuals respond to personal moral dilemmas using emotional processes and impersonal moral dilemmas using cognitive processes (Green et al., 2004). The distinction between impersonal and personal dilemmas can be explained with the help of traditional trolley problems, commonly used in moral philosophy. These problems usually consist of a trolley heading toward a group of people, often five in number, who, for some reason, such as being tied down to the tracks, are unable to get away. On an alternate set of tracks there is a single individual who will be hit if the trolley switches tracks. With an impersonal dilemma you have the choice of flipping a switch to alter the trolley's course so one person will be killed instead of five.

Most people elect to flip the switch in this case (Green et al., 2004). With a personal moral dilemma you have to push someone onto the tracks to save the five people. Most people elect not to do this (Green et al., 2004). Although these types of dilemmas may seem silly on the surface, they have helped psychologists map the moral brain and derive conclusions about how moral judgments are made.

For example, studies using these types of dilemmas have shown that subjects with damage to the portions of the brain that control emotions are more likely to make consequentialist moral judgments (Koenigs, Young, Adolphs, Tranel, Cushman, Hauser, & Damasio, 2007). Additionally, psychopaths, considered by many to be amoral, differ from healthy people in that they are also more likely to make consequentialist moral judgments (Koenigs, Kruepke, Zeier, & Newman, 2012). This is especially interesting considering the societal preference for consequentialist moral decision-making (Talmi & Frith, 2007). Dilemmas have also shown that people who are more empathetic are more likely to make deontological moral judgments (Conway, 2013). Finally, time has been shown to play an important role in moral decision-making, with quicker responses leading to deontological moral judgments (Suter & Hertwig, 2011).

Another line of research examines whether honesty is the result of an individual's active resistance to temptation, or if it is the result of the absence of temptation. If honesty results from the active resistance to temptation, then cognitive processes would come into play when individuals have the opportunity to be dishonest. On the other hand, if honesty results from the absence of temptation, then automatic responses would determine behavior. It turns out that honest individuals do not engage additional cognitive processes when they fail to act dishonestly (Green & Paxton, 2009). This will

perhaps be less surprising if you recall the last time you were in your favorite store. It is unlikely that you were actively considering whether or not you should steal something the entire time. Most people, however, believe that honesty results from the active resistance to temptation (Green & Paxton, 2009). This can be added to the list of neuromyths, which are commonly held beliefs about the brain that are inconsistent with brain research (Hardiman, 2012). These findings are relevant to this study because they show that automatic emotional responses can lead to moral decisions.

Despite the significant role automatic emotional responses have been shown to play in moral decision-making, emotional considerations of ethical dilemmas are discouraged in modern society (Talmi & Frith, 2007). However, purely conscious reasoning simply cannot account for all responses to moral dilemmas (Hauser, Cushman, Young, Jin, & Mikhail, 2007). Additionally, it is possible that conscious reasoning may actually come into play when an individual attempts to find a principle that is consistent with his or her automatic emotional moral judgment (Hauser et al., 2007). Often, for example, subjects will rewrite dilemma assumptions in order to produce a coherent consequentialist justification for their automatic emotional response (Greene, 2014).

In summary, the amygdala and vmPFC are brain regions associated with automatic emotional responses (Cunningham, Johnson, Raye, Gatenby, Gore, & Banaji, 2004), and they lead individuals to make deontological moral judgments (Greene, 2014). These regions are activated in response to personal moral dilemmas. The DLPFC is a brain region associated with conscious cognitive processing (Cunningham et al., 2004), and it leads individuals to make consequentialist moral judgments (Green, 2014). The DLPFC is activated in response to impersonal moral dilemmas. The findings discussed

above suggest that K-12 moral education efforts should not focus solely on either reasoning or empathy, as both play an important role in moral decision-making.

Ethics of Principles and Ethics of Care

In moral education literature, cognitive responses and automatic emotional responses are differentiated, with cognitive responses aligning with Ethics of Principles and automatic emotional responses aligning with Ethics of Care. Reasoning in terms of Ethics of Principles looks different in the brain than reasoning in terms of Ethics of Care (Narvaez & Vaydich, 2008), and, as discussed above, brain research shows that *both* reasoning and emotions are important, although the relationship between the two is complex (Deety & Howard, 2013; Keefer, 2013).

Ethics of Principles

Ethics of Principles deals with cognitive moral development, or moral reasoning. Moral reasoning matters because individuals at earlier stages of cognitive moral development are more likely to make unethical choices (Kish-Gephart, Harrison, Trevino, 2010). Evaluating student moral reasoning can give teachers an understanding of the moral development levels of their students, which is important because of the relationship between learning and developmental levels (Vygotsky, 1978). Evaluating moral reasoning will also provide teachers with insight into students' pre-existing knowledge, which constructivism and cognitivism both emphasize. Constructivism stresses the importance of flexibly constructing meaning from prior experiences, with emphasis on the process of construction, rather than the content (Ernest, 2010; Ertmer & Newby, 1993). Cognitive approaches similarly stress that learners construct new knowledge based on what they already know and believe (Bransford et al., 2000;

Bruning, Schraw, & Norby, 2011). These approaches also emphasize that learners make new information fit with their preconceptions (Bransford et al., 2000; Schunk, 2008). In the end, learning improves when teachers understand student pre-existing beliefs, use this knowledge to inform their instruction, and monitor student beliefs as instruction progresses (Bransford et al., 2000).

Teachers can be trained to question students in order to identify their current stages of moral development, thus allowing teachers to assess students' pre-existing beliefs, and helping teachers scaffold instruction to advance students to the next higher stage of moral development. Kohlberg's stages of moral development have specific characteristics. According to Kohlberg, the trajectory of an individual's moral development does not fluctuate and, with the exception of severe trauma, an individual's moral development will never regress (Kohlberg & Peters, 1975). Additionally, individuals will never skip a stage of moral development; they will always go through the stages sequentially (Kohlberg & Peters, 1975; Rest, 1980). Finally, individuals understand the reasoning employed at each of the stages they have passed through but tend to have a preference for the most advanced reasoning they are capable of (Kohlberg & Peters, 1975; Rest, Turiel, & Kohlberg, 1969; Rest, 1973). This is because individuals have trouble acting according to reasoning that is less sophisticated than what they are capable of due to the cognitive tension created by the discrepancy between the two (Kish-Gephart, Harrison, Trevino, 2010; Kohlberg & Peters, 1975).

Kohlberg and Peters (1975) pointed to a number of studies that validate these characteristics, although some of these characteristics, such as individuals never skipping stages, have been brought into question (Koh, 2012). Kohlberg defined six stages of

moral development, which appear to be universal (Nisan & Kohlberg, 1982), and current research supports this structure (Koh, 2012).

- **Stage 1.** At the first stage of moral development an individual is concerned with the immediate consequences of a decision, and whether an action is good or bad depends on these consequences. An individual views avoiding punishment and yielding to authority as being good, without qualification.
- **Stage 2.** At the second stage of moral development an individual has an understanding of fairness, but only in the sense that being unfair brings consequences with it. Reciprocity is understood in a tit-for-tat way, and an individual has no sense of justice or loyalty.
- **Stage 3.** At the third stage of moral development an individual is concerned with being nice and good. An individual wants others to approve of his or her actions, and intentions matter for the first time.
- **Stage 4.** At the fourth stage of moral development an individual is most concerned with rules and feels a sense of duty to follow them.
- **Stage 5.** At the fifth stage of moral development an individual is concerned with rights that society has agreed upon, and laws are important because society agrees on them.
- **Stage 6.** At the sixth stage of moral development an individual is concerned with internal, universal, abstract principles, such as justice, reciprocity, equality, and respect.

(Kohlberg & Peters, 1975)

The atmosphere in schools is generally a blend of Stage 1 and Stage 4 reasoning (Kohlberg & Hersh, 1977), and most adults only reach Stage 3 or Stage 4 (Jones & Ryan, 1997; as cited in Jackson, Wood, & Zboja, 2013).

Ethics of Care

As dual-process theory suggests, advancing moral reasoning is not the only way to advance moral development. Empathetic dispositions can and should be elevated as well, as caring and nurturing environments help children grow to become adults who value tolerance and compassion (Narvaez & Bock, 2014). Modeling is one way to elevate student empathetic dispositions, and the most effective way a teacher can model caring is to simply, and genuinely, care for the students in her class (Noddings, 2010). The establishment of these relationships can provide the foundation for other moral education efforts (Narvaez & Bock, 2014), including efforts to advance student moral reasoning. Caring teachers are committed, improvement-oriented relationship builders (Collier, 2005), and children excel when teachers establish individual, caring relationships with them (Narvaez, 2010). These types of relationships contribute to establishing an environment that is altruistic and mastery-oriented (Narvaez, 2010), and these environments help to measurably advance student moral development (Zdenek & Schochor, 2007). When children internalize the caring attitudes of those around them they become more empathetic and caring themselves (Slote, 2010). Social cognitive theory, and in particular observational learning, provides the theoretical foundation for this approach. This theory emphasizes the importance of modeling, which can substantially shorten the time it takes to acquire new information and is an essential component of learning (Bandura, 1986).

Moral tendencies also develop from straightforward instruction (Narvaez, 2010). Once a foundation is laid, students can be presented with opportunities to practice caring (Noddings, 2010). Constructivism is the learning theory that provides the strongest justification for this approach, since students are creating meaning from their experience by carrying out authentic and meaningful tasks in a realistic environment (Ertmer & Newby, 1993). The emphasis here is not on any specific content, but rather on the process of caring in real world situations in a type of cognitive apprenticeship (for a discussion of cognitive apprenticeships, see Ertmer & Newby, 1993). This approach is also supported by research on extended practice (Bransford et al., 2000; Bruning et al., 2011).

Implications for Educators

Teachers are well positioned to advance their students' moral development (Halverson, 2004). Multiple avenues are available to educators that have the potential to both advance moral reasoning and elevate empathetic dispositions. This section is comprised of four sub-sections that address (a) moral reasoning, (b) empathetic dispositions, (c) reflection, and (d) direct instruction. First, research dealing with advancing moral reasoning will be reviewed, and integrating Socratic questioning into instruction, which is the primary implication of this research, will be discussed. Then, strategies that can be used to elevate student empathetic dispositions will be examined. These strategies include modeling care, providing students with appropriate feedback, and providing students with opportunities to practice caring. Next, research dealing with the importance of providing students with opportunities to reflect will be discussed, and connections will be made between reflection and previously discussed implications, such

as Socratic questioning. Finally, research and literature having to do with situational morality will be examined.

Advancing Moral Reasoning

Moral reasoning can be both evaluated and advanced, and there is a clear connection between moral reasoning and moral action (Rest, 1980). The instructional strategies discussed below have been shown to positively influence both moral judgment and moral behavior (Blatt & Kohlberg, 1975/1994; Kohlberg, 1975; Krebs & Rosenwald, 1977). These strategies accelerate moral development and the effects are long lasting, as one study showed that developmental advances, in comparison with a control group, remained a year later (Blatt & Kohlberg, 1975/1994). Other studies also showed that instruction can lead to significant advances in moral development (Kohlberg, 1975), and that more advanced moral development is equated with more moral action (Krebs & Rosenwald, 1977).

The cognitive approach to moral education utilizes Socratic dialogues that aim to advance student moral reasoning (Kohlberg & Peters, 1975). Kohlberg believed an open atmosphere has to exist in which students can both be exposed to the next higher stage of moral development and be exposed to situations that make them question their existing beliefs (Kohlberg & Peters, 1975). Subsequent research supported the idea that instruction with a significant emphasis on moral reasoning will advance moral development, although this research did not support the idea that exposure to reasoning at the next higher stage is helpful (Rest, 1980). The latter finding is interesting, since Vygotsky's (1978) work on the zone of proximal development suggests such exposure to the next higher stage would contribute to advancing moral development. In order to

bring about significant advances in moral development, instruction has to take place over the course of many months, at least (Rest, 1980).

Socratic questioning is a social activity that forces students to question their pre-existing knowledge (Paul & Elder, 2007). This approach to advancing moral development is grounded in social constructivism, which emphasizes the importance of dialogue and social interaction in learning (Ernest, 2010). Class discussions and peer interactions give students the opportunity to construct new knowledge (Bruning et al., 2011). These discussions and interactions will allow more advanced students to contribute to their classmates' learning (Vygotsky, 1978). This approach to advancing moral development also stimulates the kind of thinking that leads to metacognitive experiences (Flavell, 1979). This is relevant because the ability to monitor understanding distinguishes experts from novices, and stimulating this type of thinking enhances learning (Bransford et al., 2000). This ability to think about thinking may be even more important than knowledge and skills (Bruning et al., 2011). For these reasons, schools provide a unique opportunity to advance moral development (Zdenek & Schochor, 2007).

An implication is that Socratic discussions should be integrated into instruction if the aim is advancing student moral development. Teachers can ask questions dealing with the clarity, precision, accuracy, relevance, depth, and breadth of student reasoning (Elder & Paul, 2007). While Socratic questioning can be spontaneous, focused, or explanatory (Paul & Elder, 2008), dialogues intended to advance moral reasoning will generally be focused (Kohlberg & Peters, 1975). Literature can be used as a springboard for Socratic dialogues, and initially it is best to choose simpler texts (Styslinger & Pollock, 2010). The teacher's role in these discussions is to act as a facilitator

(Chorzempa & Lapidus, 2009). His or her own opinion should not be stressed and should be viewed as one opinion among many (Kohlberg & Peters, 1975). The at times seemingly superficial nature of these dialogues can be deceiving, as transcript analysis of discussions initially viewed as shallow has shown that students actually made meaningful connections (Styslinger & Pollock, 2010). Socratic discussions can be integrated into existing curriculum and instruction, which is an approach to moral education teachers seem to prefer, as will be discussed in the next chapter. Research suggests that teachers should emphasize dilemmas dealing with interpersonal relationships, rather than the types of dilemmas more commonly used with adults (Yussen, 1977). Socratic questioning has been shown to positively influence both moral judgment and moral behavior (Blatt & Kohlberg, 1975/1994; Kohlberg, 1975; Krebs & Rosenwald, 1977), and this type of questioning will form the basis for how students make moral decisions over the course of their entire lives (Siegel & Bryson, 2011).

Elevating Empathetic Dispositions

Shifting to the emotional side of moral development, our brains are hardwired to be sensitive to others' needs (Decety & Howard, 2013), and brain research suggests that efforts to elevate empathetic tendencies, if carried out over an extended period of time, will contribute to permanently rewiring empathy circuits in the brain (Narvaez & Vaydich, 2008). Moral development can be advanced by improving the moral environment (Kohlberg & Peters, 1975), and caring relationships are essential to creating this type of atmosphere (Noddings, 2010). In homes, low levels of emotional hostility are associated with the development of empathy in children (Eisenberg, 2000), and this is likely true in classrooms, as well.

Teachers can develop these types of relationships and establish a caring atmosphere by modeling what caring looks like, providing students with appropriate feedback about their actions, and providing students with the opportunity to practice caring (Noddings, 2010). Unfortunately, unlike moral reasoning, which can be evaluated, empathy is more difficult to measure (Wren, 2010).

Modeling caring. Teachers are, by default, moral role models for the students in their classes (Kristjansson, 2006); therefore, the way teachers model empathy and other values will have a major impact on their students' brain development (Siegel & Bryson, 2011). This type of modeling is emphasized within the teacher evaluation process in Pennsylvania Public Schools, which use the Danielson Framework (Danielson, 2007). It is also a component of the Brain-Targeting Teaching Model, which emphasizes the importance of modeling in fostering a nurturing classroom environment and recommends specific teacher actions that can help establish this type of environment (Hardiman, 2012). Such strategies include behavior-specific praise, direct communication, consistent expectations, and appropriate humor (Hardiman, 2012). Teachers can also provide students with opportunities to choose activities, to work together, and to quietly reflect (Hardiman, 2012). Additionally, teachers can model caring by listening to students respectfully and attentively, being courteous and respectful, helping students succeed, and providing students with freedom and responsibility (Collier, 2005). The most effective way a teacher can model caring might be to simply establish caring relationships with her students. Establishing caring relationships with individual students is a fundamental component of moral education and can be seen as an essential first step in efforts to advance their moral development (Narvaez & Bock, 2014).

Finally, teachers can model appropriate empathetic reactions during guided reading and similar activities. As with Socratic questioning, having open-ended discussions about moral issues is grounded in social constructivism. During an elementary guided reading lesson in language arts, teachers can both model appropriate empathetic reactions and incorporate Socratic dialogues. For example, a novel such as Lois Lowry's *Number the Stars* (1989), which was awarded the Newbery Medal in 1990 and is commonly used for guided reading in upper elementary grades, provides teachers with many opportunities to both empathize with the characters *and* lead Socratic dialogues that force students to question their pre-existing beliefs. This novel, a historical fiction dealing with a young girl who has to help her Jewish friend during the Holocaust, is ideally suited to advance student moral development. But nearly all high-quality literature will provide teachers with plenty of opportunities to empathize with characters and lead Socratic discussions regarding moral issues (see Rosenstand, 2006).

Providing appropriate feedback. In a similar vein, empathy is developed in children when parents help them understand others' emotions (Eisenberg, 2000). Similarly, teachers can contribute to developing empathy in their students by helping them understand the emotional pain they cause when they act in non-caring ways (Noddings, 2010). As discussed above, modeling is one way to do this. Additionally, a teacher can confirm a child's moral motives, even when the action is wrong (Noddings, 2010). For example, if a child lets a friend copy his work, the teacher can acknowledge that wanting to help your friend is a good thing. The teacher can then engage in a discussion with the child to help him understand he fell short of this principle, since in the long run he is not really helping his friend. Another effective strategy is for the

teacher to ask the guilty student to imagine himself or herself as the victim (Narvaez & Lapsley, 2013; Slote, 2010), in order to encourage understanding and recognition of the other student's feelings (Siegel & Bryson, 2011). Empathy is something that can be developed in a child (Siegel & Bryson, 2011), and these types of inductive discipline strategies have been shown to effectively foster empathy in children (Eisenberg, 2000).

Although feedback is necessary, educators must be aware that feedback about moral actions can potentially exert a negative impact, and therefore must approach these situations cautiously. Behaviorist strategies of rewards and punishments in the form of praise and blame can effect the actor's motivations in unintended, and counterintuitive, ways (Springer, 2008). Instead, feedback can be aimed at helping students make more authentic connections, a practice consistent with cognitivism (Ertmer & Newby, 1993). Teachers also should avoid a tone of moral superiority and understand that students have their own, individual, moral beliefs (Springer, 2008).

Practicing caring. From incorporating Socratic questioning into instruction in an effort to advance student moral reasoning to serving as a moral role model in an attempt elevate student empathetic dispositions, all of the efforts previously discussed are, in the end, aimed at preparing students to *act* more morally than they otherwise would have. Aristotle (trans. 1998) believed that the best way to go about becoming more moral is to just go out and do moral things:

> Actions, then, are called just and temperate when they are such as the just or temperate man would do . . . it is by doing just acts that the just man is produced, and by doing temperate acts the temperate man; without doing these no one would have even a prospect of becoming good (p. 300).

Similarly, moral expertise is now defined not in terms of moral reasoning ability or empathetic disposition, but rather in terms of virtue application, which teachers can promote by asking questions such as "How are you going to make the world a better place for everyone?" and "What positive goals do you have for today?" (Narvaez & Bock, 2014, p. 19). Teachers can follow-up by asking, "How did you help someone in school today?" (Narvaez & Bock, 2014, p. 19).

Service learning, which is a curriculum-aligned activity that integrates community service with classroom instruction (Kielsmeier, Scales, Roehlkepartai, & Neal, 2004; Skinner & Chapman, 1999), can positively impact students of all ages (Spring, Grimm, & Dietz, 2008); and it can put students in positions to practice caring. It is associated with advances in student moral development (Billig, 2002; Billig, 2000; Scott, 2012), along with a number of other student outcomes, including improved academic achievement (Billig, 2002; Billig, 2000; Spring et al., 2008), improved academic engagement (Spring et al., 2008), increased self-efficacy (Billig, 2000; Spring et al., 2008), higher attendance (Scales et al., 2006), and decreased misbehavior (Billig, 2000). The positive impact of service learning is magnified in schools with students from low socio-economic backgrounds (Kielsmeier et al., 2004; Scales et al., 2006; Spring et al., 2008).

Service learning is relevant to this study because it is associated with advances in student moral development (Billig, 2002; Billig, 2000; Scott, 2012). Service learning is also positively associated with increased self-efficacy (Billig, 2000; Spring et al., 2008), which, in turn, is negatively associated with moral disengagement (Bandura & Barbanaelli, 1996). Literature having to do with elevating student empathetic dispositions stresses the importance of giving students opportunities to practice caring

(Noddings, 2010), and service learning provides students with such an opportunity. Research suggests that service learning has the potential to positively influence both empathetic dispositions and moral reasoning (Narvaez & Vaydich, 2008; Paxton, Ungar, & Greene, 2011).

Additionally, service learning provides teachers with a means to target a wide range of knowledge and cognitive process categories within the revised version of Bloom's Taxonomy (Krathwohl, 2002). These include higher categories that teachers often have a difficult time targeting during instruction, specifically categories within the metacognitive knowledge dimension and within the evaluate/create cognitive process dimensions. Service learning is closely linked with curriculum and instruction, and often extends beyond commonly conceived notions of community service. In order to maximize the benefits of service learning, emphasis can be placed on a) divergent thinking, such as that which occurs when multiple solutions to a problem are sought and which is associated with improved creative problem solving (Hardiman, 2012); b) adaptive expertise, which can be gained when students flexibly apply what they learn in class as part of a service learning project (Bransford, Brown, & Cockings, 2000; Hardiman, 2012); and c) reflection, which is important for self-regulation and metacognition (Bransford et al., 2000), and is an essential component of service learning (Billig, 2002; Kahne & Westheimer, 1996; Kiely, 2005; Scales et al., 2006; Scott, 2012; Spring et al., 2006; Strain, 2005; Terry & Bohnenberger, 2004). Finally, service learning can support the ongoing development of cultural awareness (Banks, 2015). Although rubrics have been suggested as a way to evaluate these projects (Scott, 2012), student work on these assignments should not be rewarded because the reward may take the place

of an authentic caring impulse (Noddings, 2010). Brain research shows that caring is its own reward, as reward systems in the brain are activated when individuals act compassionately (Narvaez & Vaydich, 2008).

A number of actions can be taken to increase the likelihood of successful integration of service learning across the curriculum, including providing staff with support, training, and technical assistance (Spring et al., 2008). Additionally, service learning is more likely to be successful when it is included in the strategic plan, part of a board-approved curriculum, part of staff orientation, and considered on teacher evaluations (Spring et al., 2008). Table 2.2, below, provides an overview of how service learning can potentially be incorporated across grade levels. The instructional design perspective, which takes into account the learner's level of mastery and the difficulty of the learning task (Ertmer & Newby, 1993), was used to construct this.

Table 2.2

K-12 Service Learning

Measure	Primary/Elementary (kindergarten-5th)	Middle School (6th-8th)	High School (9th-12th)
Emphasis of Service Learning (Terry & Bohnenberger, 2004)	service	exploration	action
Stage of Cognitive Development (Terry & Bohnenberger, 2004)	concrete operational	concrete operational / formal operational	formal operational
Stage of Moral Development (Kohlberg & Hersh, 1977)	Stages 1-2	Stages 2-3	Stages 3-4
Level of Reflection (Terry & Bohnenberger, 2004)	observation	analysis	synthesis
Primary Knowledge Dimensions (Krathwohl, 2002)	conceptual procedural	procedural metacognitive	procedural metacognitive
Primary Cognitive Process Dimensions (Krathwohl, 2002)	understand apply	apply analyze	evaluate create
Stage of Cultural Identity (Banks, 2015)	Stages 1 and 3	Stages 3 and 4	Stages 3, 4, 5, and 6

(continued)

Measure	Primary/Elementary (kindergarten-5th)	Middle School (6th-8th)	High School (9th-12th)
Potential Activities (Terry & Bohnenberger, 2004)	- projects at home (e.g. doing dishes, cutting grass) - volunteering at school (e.g. tutoring, organizing books) - working with senior citizens as part of an ongoing class project	- information gathering and interpretation in community - internships coupled with reflection - volunteering coupled with reflection	- initiating school reform initiatives - developing and implementing models for community improvement - legislative initiatives - grant writing

Reflection and Moral Behavior

Self-regulation is an important component of moral development (Narvaez, 2014), and it positively impacts moral behavior (Eisenberg, 2000). Reflecting on moral judgments is essential, as it increases the effect of argument strength (Paxton, Ungar, & Greene, 2011). More noteworthy, however, is that when a moral argument is not reflected upon the strength of the argument does not have any effect at all (Paxton et al., 2011). Put another way, stronger arguments are only more persuasive than weaker ones when individuals have time to reflect. This is important because students can be persuaded by arguments directed at either their emotions or reasoning (Paxton et al., 2011). But in order for this to happen, they must be given time to reflect.

These findings have a number of implications related to the instructional strategies discussed above. These findings suggest that during guided reading sessions that incorporate Socratic questioning dealing with moral dilemmas found in the literature, providing students with time to reflect following strong arguments will influence their moral judgment. These findings also suggest that when teachers model appropriate

empathetic reactions, students should be given time to reflect on those reactions. Participants in the study mentioned above were given two minutes to reflect after an argument was presented to them (Paxton et al., 2011). The study did not examine whether other times would have similar effects, and this is something teachers had to consider during implementation.

Teachers might also lead open discussions in which students discuss a topic of concern. When a student makes a particularly strong argument during these discussions, the teacher can rephrase the argument and then give the students time to reflect on it. Providing this time for reflection may improve student metacognitive skills (see Bransford et al., 2000), and these efforts may also help students become more empathetic (Eisenberg, 2000).

Direct Instruction

Direct instruction regarding moral issues is not something that is heavily emphasized in literature, and teachers interviewed for this study's needs assessment seemed to dislike the idea of it. However, individuals who believe circumstances drive ethical choices or, in other words, subscribe to the moral philosophy of relativism, are more likely to make unethical choices (Kish-Gephart, Harrison, Trevino, 2010). Because of this, teachers should consider deemphasizing the importance of circumstances when discussing moral judgments and speak in terms of moral absolutes, when appropriate. This relates to what van IJzendoorn, Bakermans-Kranenburg, Pannebakker, and Out (2010) describe as situational morality. They discuss a series of studies showing that situational factors are more important than any other factor in predicting moral action. An implication is that students should be made aware of the impact situational factors

have on moral decision-making. The authors suggest that real examples of situational immorality and altruistic behavior be used to help children better understand the determinants of their moral behavior.

Special Considerations

Participating teachers were introduced to research and literature on moral development and (a) giftedness, (b) gender, (c) mild learning disabilities and ADHD, and (d) traumatic brain injury.

Although gifted students tend to reach a higher stage of moral reasoning earlier than their peers, giftedness does not predict mature moral judgments (Terri & Pekhonen, 2002). And although high academic ability is a necessary condition for advanced moral judgments, high academic ability alone is not sufficient (Derryberry et al., 2005; Donnenberg & Hoffman, 1988; Narvaez 1993). While students with high academic ability demonstrate superior moral judgment compared with average ability students (Narvaez, 1993), moral judgment is only one component of morality, the others being moral sensitivity, moral motivation, and moral action (Narvaez & Vaydich, 2008). Even among gifted students, there are significant differences in their moral judgment (Narvaez, 1993; Tirri, 2011). These findings are relevant to this intervention because teachers should be aware that in addition to students advancing to higher stages of moral reasoning more quickly based on their age, gifted students will likely advance to a higher stage before their classmates. It also appears that a gifted student's moral development will lag behind their cognitive development to a greater extent than a teacher may anticipate. Teachers should keep in mind that gifted students who demonstrate superior

moral judgment, which is closely related with intellect, may not have advanced moral sensitivity, motivation, or character.

As previously mentioned, Gilligan (1977) argued that men and women use different processes when making moral decisions. Subsequent research has shown that men and women do not significantly differ in how they make moral judgments (Derryberry et al., 2005; Kish-Gephart et al., 2010). For example, Derryberry et al. (2005) found that gender differences were not significant, and in their study women actually made more justice-based decisions then men. This is relevant to this intervention because when attempting to advance their students' moral development, teachers should not attempt to differentiate instruction based on a child's gender. For example, it would be a mistake for a teacher to emphasize empathy with girls and moral reasoning with boys.

Instruction should not be differentiated based on gender, but should expected outcomes be differentiated based on disorders? Vehmas (2011) considered whether individuals with mild intellectual disabilities or ADHD should be exempt from moral responsibility. Courts have found that ADHD invalidates an individual's free will and accountability (Tait, 2006), although criminal responsibility and moral responsibility are not the same. Individuals with these disabilities meet Shoemaker's (2009) criteria for being able to bear moral responsibility in that individuals with these disorders (a) can be aroused by others' distress, (b) have the capacity to feel guilt and remorse, and (c) have the capacity to empathize. This is relevant to this study because teachers should recognize that students with mild intellectual disabilities and ADHD are morally culpable.

Finally, traumatic brain injury (TBI) may adversely impact moral development. TBI sometimes leads to aggression, which may be displayed in the form of unpredictable rage and an inability to control angry impulses (Manchester, Wall, Dawson, & Jackson, 2007). Also, after TBI beliefs often become more rigid, such that underlying antisocial beliefs held before injury are unlikely to be overcome. Manchester et al. (2007) attempted to teach pro-social skills to individuals in a group home who previously suffered TBI and were characterized as being bullies. The authors concluded that their peer group approach can lead to changes in pro-aggressive beliefs in some cases following TBI. The authors found that changes in pro-aggressive beliefs led to behavioral improvements, and that group reinforcement played an important role in maintaining aggressive behavior.

Limitations and Responses

Some of the instructional strategies discussed in this chapter are, for the most part, most applicable when working with groups of students, rather than individuals. This makes sense considering the social nature of moral expertise (Narvaez & Lapsley, 2014), although it has to be noted that the study of social morality is in its infancy. Although there is little research on what impacts social morality levels (Liu, Chen, & Zhang, 2013), sociobiological research does show that an inclination towards altruism is advantageous at the group level (Wilson, 2007).

The most serious limitation is that the connection between the instructional strategies discussed in this chapter and K-12 student outcomes is not strong. Neuroscience can be used to formulate bold statements that have little to do with brain science research (Bruer, 2008). These bold statements are the result of "unwarranted

extrapolations" brought about by level-of-analysis errors and level-of transfer-errors (Whitehead, 2011, p. 82). Unfortunately, it has become "exceedingly difficult to separate the science from the speculation, to sort what we know from what we would like to be the case" (Bruer, 2008, p. 54). For example, van IJzendoorn et al. (2010) noted that brain activity, frequently used to back claims having to do with morality, is likely overstated since elevated brain activity is not necessarily the cause of a behavior; it is possibly the consequence of the behavior or merely associated with it.

Although efforts were taken not to exaggerate relationships, it is worth highlighting that the connections between research and the instructional strategies discussed in this chapter are not straightforward. For example, while parents have successfully used some of the strategies having to do with Ethics of Care to help their children become more empathetic, research has not shown that teachers can do the same. And reflection has advanced moral reasoning in controlled conditions, but this has not been researched in K-12 classrooms. The relevance of this research was not exaggerated when working with teachers.

Chapter 2: Summary and Conclusion

In order to build a bridge between moral development research and teacher practice, efforts were taken to increase teacher efficacy regarding moral development by familiarizing participants with research related to this. Teachers were also familiarized with potential implications of those findings. It was then up to them to decide how to adapt the research to meet the specific needs of their students, and advance their moral development.

When it comes to moral matters, neuroscience is important, but in the end average people have to pave their own paths (Cushman & Greene, 2012). This intervention was intended to prepare teachers to provide students with a little help along the way.

Statement of the Problem

Researchers have shown that moral development can be positively influenced, and they have identified ways to go about it. The problem is that these ideas have yet to make their way into K-12 classrooms. This may be due, in part, to insufficient training. While teachers are doing what they can to advance their students' moral development, there is an opportunity for them to gain expertise in this area and make an even greater difference.

Research Question

How can teachers integrate moral education into curriculum and instruction?

Chapter 3: Needs Assessment

As noted earlier, when working with the teachers participating in this study, stress was placed on teacher and student strengths and the opportunity that exists to change things for the better when it comes to moral education. At the same time, the fact that there is a real need for this work was not ignored. A conceptualization of moral education in a school context is teachers attempting to advance student moral development. This includes (a) attempting to advance student moral reasoning and (b) attempting to elevate student empathetic dispositions. This needs assessment provides a deeper understanding of the disconnect between moral education research and practice.

Methods

Primary data for this study was gathered during semi-structured interviews with teachers and administrators in the Iron Hills School District (pseudonym). Secondary data for this study was collected from strategic statements published by the 42 public school districts supported by the Allegheny Intermediate Unit and from course descriptions from the 25 universities Iron Hills School District teachers were certified through.

Sample

All students in the Iron Hills School District attend kindergarten at the same primary center, but afterwards students attend neighborhood schools through 5th grade. One of the two elementary schools, Washington Elementary (pseudonym) has a building level academic score of 80, based on the 2012-2013 Pennsylvania School Performance Profile. 93% of the students are white, and 37% are economically disadvantaged. The other elementary school, Roosevelt Elementary (pseudonym) has a building level

academic score of 54, based on the 2012-2013 Pennsylvania School Performance Profile. This puts it in the bottom 5% of schools in the state. 78% of the students are black or multi-racial, and 81% are economically disadvantaged.

All students are reunited in 6th grade at the Iron Hills Middle School, where all of the interviewees worked. Students are intermixed for history, science, and specials. Students are grouped based on ability in math and language arts. The majority of the students in the general education classes attended Roosevelt Elementary and are African American; while the majority of the students in the advanced classes attended Washington Elementary and are white. Students with special needs take special education classes.

Interviews. Six Iron Hills School District middle school teachers and administrators were interviewed for this needs assessment. Below is background information about the interviewees. Some interviewees have since switched positions, gotten married, or had additional children; and all of the interviewees have additional years working in the field of education.

Interviewee 1. Interviewee 1 attended the University of Pittsburgh, where he earned degrees in philosophy with an emphasis on ethics, and creative writing. Following graduation he worked as a journalist before returning to the University of Pittsburgh, where he earned a Masters in the Art of Teaching. Interviewee 1 is a National Board Certified Teacher who had been teaching for 12 years when he was interviewed. At the time of the interview he was an 8th grade general language arts teacher and was married with one child.

Interviewee 2. Interviewee 2 attended Chatham University, where she received both a bachelors and masters degree. She also earned a doctorate from Indiana University of Pennsylvania in Curriculum and Instruction. At the time of the interview, she was in her 14th year teaching 8th grade, and she previously served as Director of Curriculum and Instruction for one year before returning to the classroom. Her dissertation focused on how students can become more empathetic. Interviewee 2 was an 8th grade advanced language arts teacher and was a semi-finalist for Pennsylvania 2014 Teacher of the Year. She was married with no children.

Interviewee 3. Interviewee 3 attended California University of Pennsylvania and was in her 17th year of teaching when interviewed. She was an 8th grade science teacher, and was married with two children.

Interviewee 4. Interviewee 4 attended Duquesne University and received a masters degree from California University of Pennsylvania. She was the middle school principal when she was interviewed, and she previously worked as a special education teacher. Interviewee 4 was married with no children.

Interviewee 5. Interviewee 5 attended Penn State University and received a masters degree from California University of Pennsylvania. He had been teaching for 17 years when he was interviewed. Interviewee 5 was a 6th grade general language arts teacher, and he also coached wrestling at the collegiate level. He was married with two children.

Interviewee 6. Interviewee 6 attended West Virginia University and had 12 years experience as a physical education and health teacher. He had taught at the elementary,

middle school, and high school levels. Interviewee 6 was the middle school physical education teacher when he was interviewed, and was married with four children.

District strategic statements. Strategic statements from the 42 public school districts supported by the Allegheny Intermediate Unit were analyzed. Intermediate Units are regional education service agencies in Pennsylvania that operate between school districts and the Department of Education. The Executive Sponsor for this study was the Curriculum and Instruction Coordinator for the Allegheny Intermediate Unit, and, if the original plan for this intervention had been adhered to, teachers from six districts supported by the intermediate unit would have participated in this study, and the model the teachers developed would have been disseminated to all 42 districts.

Strategic statements, including visions, missions, and beliefs, succinctly capture what organizations believe to be of utmost importance (Collins & Porras, 1996). All organizational policies and procedures should be aligned with these statements, and operational decisions should be made with these statements in mind. These statements matter because they have been shown to impact both organizational performance and group effectiveness (O'Connell, Hickerson, & Pillutla, 2011). The concept examined when reviewing strategic statements was moral development. The variable was moral development emphasis in strategic statements. These statements were available on district websites and included missions, visions, values, beliefs, and codes. Districts had between one and three statements available online. For example, some districts only included a mission statement on their web site, while others included a mission statement, vision, and beliefs. Making the decision to make some documents easily accessible to the public is, in and of itself, an important operational decision and is why additional

statements districts may have placed on file, but decided not to publish, were not requested for this study. Some districts provided online access to strategic documents, including strategic plans and comprehensive plans. When such documents were available they were examined, since the district made the choice to make them easily accessible to the public. Strategic and comprehensive plans generally included between two and three strategic statements. In most cases these documents were not accessible, in which case the statements districts elected to provide on their web sites were examined. Below is information on the school districts included in this study.

Table 3.1

Background Information on Districts Supported by the Allegheny Intermediate Unit

School District	Communities Served	Enrollment	Staff	District Website
Allegheny Valley	Cheswick and Springdale Boroughs, Harmar and Springdale Townships	1,003	160	http://www.avsdweb.org/
Avonworth	Ben Avon, Ben Avon Heights and Emsworth Boroughs, Kill Ohio Townships	1,545	211	http://www.avonworth.k12.pa.us
Baldwin-Whitehall	Baldwin and Whitehall Boroughs and Baldwin Township	4,145	581	http://www.bwschools.net
Bethel Park	Municipality of Bethel Park	4,457	712	http://www.bpsd.org
Brentwood Borough	Brentwood Borough	1,204	164	http://www.brentwoodpgh.k12.pa.us
Carlynton	Carnegie, Crafton and Rosslyn Farms Boroughs	1,391	211	http://www.carlynton.k12.pa.us
Chartiers Valley	Bridgeville and Heidelberg Boroughs, Colli Scott Townships	3,374	553	http://www.cvsd.net
Clairton City	Clairton City	779	107	http://www.ccsdbears.org
Cornell	Coraopolis Borough and Neville Township	644	112	http://www.cornell.k12.pa.us
Deer Lakes	East Deer, Frazer and West Deer Townships	1,966	275	http://www.deerlakes.net
Duquesne City	Duquesne City	365 (K-6 only)	85	http://www.dukecitysd.org
East Allegheny	East McKeesport, Wall and Wilmerding Boroughs; North Versailles Township	1,725	200	http://www.eawildcats.net
Elizabeth Forward	Elizabeth Borough, Elizabeth and Forward Townships	2,248	298.5	http://www.efsd.net
Fox Chapel Area	Aspinwall, Blawnox, Fox Chapel and Sharpsburg Boroughs; Indi O'Hara Townships	4,254	675	http://www.fcasd.org

(continued)

School District	Communities Served	Enrollment	Staff	District Website
Gateway	Municipality of Monroeville and Pitcairn Borough	3,493	541	http://www.gatewayk12.org
Hampton Township	Hampton Township	3,014	395	http://www.ht-sd.org
Highlands	Brackenridge and Tarentum Boroughs, Ha Fawn Townships	2,447	355	http://www.goldenrams.com
Keystone Oaks	Castle Shannon, Dormont, Green Tree Boroughs	1,971	278	http://www.kosd.org
McKeesport Area	Dravosburg, Versailles and White Oak Boroughs; City of McKeesport; and South Versailles Township	3,491	530	http://www.mckasd.net
Montour	Ingram, Pennsbury and Thornburg Boroughs; Ke RobinsonTownships	2,798	410	http://www.montourschools.com
Moon Area	Moon and Cresent Townships	3,704	486	http://www.moonarea.net
Mt. Lebanon	Mt. Lebanon	5,218	673	http://www.mtlsd.org
North Allegheny	Bradford Woods and Franklin Park Boroughs, Marshall Township and Town of McCandless	8,257	1,001	http://www.northallegheny.org
North Hills	West View Borough and Ross Township	4,264	653	http://www.nhsd.net
Northgate	Avalon and Bellevue Boroughs	1,207	170	http://www.northgate.k12.pa.us
Penn Hills	Municipality of Penn Hills	3,949	569	http://www.phsd.k12.pa.us
Pine-Richland	Pine and Richland Townships	4,618	517	http://www.pinerichland.org
Plum Borough	Plum Borough	4,030	453	http://www.pbsd.k12.pa.us
Quaker Valley	Bell Acres, Edgeworth, Glenfield, Haysville, Leetsdale, Osborne, Sewickley, Sewickley Heights and Sewickley Hills Boroughs; Ale	1,971	297	http://www.qvsd.org

and Leet Townships (continued)

School District	Communities Served	Enrollment	Staff	District Website
Riverview	Oakmont and Verona Boroughs	1,024	146.5	http://www.rsd.k12.pa.us
Shaler Area	Etna and Millvale Boroughs, Res Shaler Townships, Glenshaw	4,641	574	http://www.sasd.k12.pa.us
South Allegheny	Glassport, Liberty, Lincoln and Port Vue Boroughs Levels:	1,572	164	http://www.southallegheny.org
South Fayette	South Fayette Township	2,780	375	http://www.southfayette.org
South Park	South Park Township	1,950	222	http://www.sparksd.org
Steel Valley	Homestead, Munhall and West Homestead Boroughs	1,637	202	http://www.svsd.k12.pa.us
Sto-Rox	McKees Rocks Borough and Stowe Township	1,359	189	http://www.srsd.k12.pa.us
Upper St. Clair	Upper St. Clair Township	4,113	587	http://www.uscsd.k12.pa.us
West Allegheny	Findlay and North Fayette Townships, Oakdale Borough	3,268	417	http://www.westasd.org/
West Jefferson Hills	Jefferson, Pleasant Hills and West Elizabeth Boroughs	2,822	345	http://www.wjhsd.net
West Mifflin Area	West Mifflin and Whitaker Boroughs	2,974	368	http://www.wmasd.org
Wilkinsburg	Wilkinsburg	928	167	http://www.wilkinsburgschools.org/
Woodland Hills	Braddock, Braddock Hills, Chalfant, Churchill, Ea Pittsburgh, Edgewood, Forest Hills, North Braddock, Rankin, Swi Turtle Creek Boroughs; and Wilkins Township	3,853	526	http://www.whsd.net

(Allegheny Intermediate Unit, 2014)

University course descriptions. Course descriptions from the 25 universities where teachers in the Iron Hills School District received their teaching certification from were analyzed. All course descriptions for courses required to receive a teaching certification in any subject area offered by the university were reviewed, along with courses that would contribute to fulfilling requirements necessary to obtain a teaching certificate. The concept examined was moral development emphasis in university course descriptions, using the same criteria described above. These statements were coded based upon the inclusion of content that focused on moral development to establish a measure of emphasis on moral development. University course descriptions were specific enough that it is reasonable to expect that if moral development were covered in the course then it would be included in the course description. Many universities included multiple references to social development, emotional development, and physical development in their course descriptions, but had nothing to say about moral development. In some cases ethics or morality was discussed in a course description, but the course did not fall within the parameters of this analysis. For example, Indiana University of Pennsylvania has a course entitled, "Ethical and Professional Behavior." This is a one-credit course that helps prepare student teachers for their student-teaching experience, but it has nothing to do with student moral development. It is aimed at preparing future teachers to act appropriately in a professional environment. Carlow University has three courses that deal directly with moral development, but these courses are all in the Early Childhood Education program, which is geared towards pre-school. The university offers no courses that deal with moral development in its elementary, middle level, secondary, or special education programs. This study was focused on K-12

education, so pre-k courses were not considered. Below is background information on each university.

Table 3.2

Background Information on Universities that Iron Hills School District Teachers Attended

University	Iron Hills Teachers	Enrollment [Total (undergrad)]	Cost (per year)	Acceptance Rate	Description
California University of PA	19	9,400 (7,370)	$6,428	60%	Public, small suburban
University of Pittsburgh	18	28,823 (17,989)	$15,730	58%	Public, large city
Duquesne University	17	10,161 (5,705)	$27,668	70%	Private, large city, Roman Catholic
Edinboro University of PA	8	8,642 (6,587)	$6,428	75%	Public, town on fringe of urban area
Clarion University	7	7,315 (5,957)	$6,428	79%	Public, town remote from urban area
Penn State University	7	45,233 (37,830)	$15,562	55%	Public, small city
Carlow University	5	2,768 (1,526)	$24,230	65%	Private, large city, Roman Catholic
Indiana University of PA	5	15,126 (12,505)	$6,428	60%	Public, town distant from urban area
Seton Hill University	5	2,258 (1,663)	$28,350	67%	Private, large suburb, Roman Catholic
Point Park University	4	4,061 (3,389)	$24,020	75%	Private, large city

(continued)

University	Iron Hills Teachers	Enrollment [Total (undergrad)]	Cost (per year)	Acceptance Rate	Description
Chatham University	3	2,266 (751)	$30,382	62%	Private, large city
West Virginia University	3	29,306 (21,823)	$17,690	87%	Public, small city
Bethany College	2	913 (876)	$23,880	64%	Private, rural area on fringe of an urban area, Christian Church (Disciples of Christ)
Slippery Rock University of PA	2	8,852 (7,995)	$6,428	67%	Public, town distant from an urban area
Washington & Jefferson College	2	1,460 (1,427)	$37,850	43%	Private, large suburb
College of Wooster	1	2,003 (1,957)	$39,500	61%	Private, town distant from urban area
Davis & Elkins College	1	751 (728)	$23,500	53%	Private, town remote from urban area, Presbyterian Church (USA)
Kent State College	1	26,589 (20,577)	$17,632	89%	Public, large suburb
La Roche College	1	1,416 (1,231)	$23,328	74%	Private, large suburb

(continued)

University	Iron Hills Teachers	Enrollment [Total (undergrad)]	Cost (per year)	Acceptance Rate	Description
Norfolk State University	1	6,964 (6,075)	$17,040	65%	Public, mid-size city, Historically Black College or University
Robert Morris University	1	4,967 (3,718)	$23,410	79%	Private, large suburb
St. Bonaventure	1	2,514 (1,936)	$27,762	80%	Private, town remote from urban area, Roman Catholic
VA Polytechnic Institute & St University	1	31,006 (23,600)	$23,575	67%	Public, small city
Waynesburg College	1	2,516 (1,671)	$19,450	75%	Private, town distant from an urban area, Presbyterian Church (USA)
Westminster College	1	1,585 (1,516)	$30,320	61%	Private, town on fringe of an urban area, Presbyterian Church (USA)

(Cappex, 2014)

Coding Scheme

Interviews. Semi-structured interviews were coded using the verbatim method (Soriano, 2013). Concepts and meaning were explored in each text and compared with previously analyzed texts to draw out similarities and differences (O'Leary, 2014). This was done through a line-by-line and paragraph-by-paragraph reading of transcripts. Interview responses were examined for concepts and meaning pertaining to the following questions:

1. What is the current state of moral education in the Iron Hills School District?
2. What level of understanding do teachers in the Iron Hills School District have surrounding moral education?

Applicable statements were underlined and numbered, with numbers corresponding to one of the research questions above. In order to identify patterns and interconnections, data was initially mapped, and then converted to a tree structure (O'Leary, 2014).

District strategic statements. District strategic statements were copied and printed, and portions of the statements that dealt directly with student moral development, as previously described, were highlighted. Statements were then sorted into three categories, corresponding with literature on moral development (see Appendix A for statements in each category):

- Moral development as a primary aim (Kohlberg, 1975)
- Emphasis on care (Narvaez, 2010; Noddings, 2010; Slote, 2010, Zdneck & Schochor, 2007)
- Emphasis on values (McClellan, 1992)

University course descriptions. University course descriptions were examined for any statements having to do with student moral development. Examples of such statements would include mentioning instruction on instructional strategies aimed at advancing student moral development, instruction having to do with the stages of moral development, instruction on how to establish a caring environment, instruction on how to promote care among students, and anything having to do with instructional efforts that promote values. Any course description having anything to do with any aspect of Ethics of Principles or Ethics of Care, as well as values clarification and character education, was included.

Findings

Interviews and university course descriptions showed that most teachers in the Iron Hills School District received no instruction on moral development. This is despite the emphasis local districts place on moral development in strategic statements and the opinions of educators interviewed for this needs assessment who believed moral development is important and that school districts have a responsibility to advance it.

Interviews

Interviewees indicated that moral development is important, although there was no consensus on what moral education is. Most of the interviewees had no instruction on anything having to do with moral development during their pre-service training. Below is a brief description of what each interviewee emphasized during their interview.

Interviewee 1. Interviewee 1 strongly feels that moral development is important and that schools have to play a role in advancing it. He stressed that teachers should not force values on students. Rather, he believes teachers should serve as role models and

establish a caring environment inside their classrooms. When asked about potential challenges, he spoke in detail about student reactions and believes, based on his experiences, that working with students from lower socio-economic backgrounds will be especially challenging.

Interviewee 2. Interviewee 2 was extremely hesitant to use the word "moral" when discussing things she currently does inside her classroom, and things she believes should be done. When questioned about this she said she believes most people, and most teachers, connect the word "moral" with religion. Interviewee 2 said some students do not receive instruction on morals at home, and she therefore thinks schools have a responsibility to provide this type of instruction. When asked about potential challenges, she said some teachers will be resistant. This was based in large part on the work she did on her dissertation, which dealt with empathy.

Interviewee 3. Interviewee 3 believes that making connections with students is important, but said teachers should not force their views on students. Her conception of moral education places emphasis on preparing students for the real world. She brought up the difference between advanced students' and general students' moral development. She was very concerned about teachers overstepping boundaries and, although she believes moral development is important, she seemed worried about teachers' inability to appropriately deal with it in school.

Interviewee 4. Interviewee 4 believes schools should play a role in moral development. Despite having more pre-service instruction related to moral development than any of the other interviewees, she said she is not prepared to advance it. She believes moral education is more important with special education students than general

education students. The emphasis on religion, which was intertwined with morality in her undergraduate program, made a bad impression on her. Throughout the interview she stressed that religion should be separated completely from efforts to advance student moral development.

Interviewee 5. Interviewee 5 said that some students are in very bad shape in terms of their moral development, and he blamed the environment they grow up in. He said one challenge he has with bringing moral development into the classroom is the complete disconnect between his experiences growing up and the way he tries to raise his children, with the experiences of many of his students.

Interviewee 6. Interviewee 6 believes it is important to work with students on right versus wrong. He dismissed the idea of there being boundaries and feels that teachers should do whatever they can to advance their students' moral development.

District Strategic Statements

Public school districts in Allegheny County place considerable emphasis on moral development. Ten out of the 42 districts supported by the Allegheny Intermediate Unit clearly indicate that moral development is a primary district aim. The mission of the Duquesne City Schools, for example, is:

> Duquesne City Schools will prepare our students to be successful, ethical, caring members of a global community. We will provide experiences and opportunities that foster academic success. We will support emotional and ethical growth. We will develop a sense of community.
>
> (Duquesne City School District, 2014; see Appendix A for additional examples)

Thirteen out of the 42 districts emphasize care, especially the establishment of caring classroom environments. The mission of the West Mifflin Area School District, for example, is "to provide all students with a quality education in a safe and caring environment" (West Mifflin Area School District, 2014; see Appendix A for additional examples). Finally, eighteen districts emphasize values, especially developing respect and integrity in students. For example, one of the four sections of the Riverview School District Code states, "We are ready, respectful, and responsible for each other by:

- Showing kindness and consideration
- Including everyone in activities
- Speaking politely and showing good manners
- Accepting other's differences
- Resolving disputes peacefully"

(Riverview School District, 2014; see Appendix A for additional examples)

These findings are presented below.

Table 3.3

Districts' Emphasis on Moral Development in Strategic Statements

School District	Moral development is primary aim	Emphasis is placed on care	Emphasis is placed on values
Allegheny Valley			
Avonworth			X
Baldwin-Whitehall			X
Bethel Park			
Brentwood Borough	X		
Carlynton	X		X
Chartiers Valley			X
Clairton City			X
Cornell			
Deer Lakes			
Duquesne City	X	X	
East Allegheny			X
Elizabeth Forward			
Fox Chapel Area			X
Gateway		X	
Hampton Township	X		
Highlands		X	
Keystone Oaks			
McKeesport Area	X		
Montour			X
Moon Area			X
Mt. Lebanon			X
North Allegheny			X
North Hills		X	
Northgate	X	X	
Penn Hills			X
Pine-Richland	X	X	X
Plum Borough			
Quaker Valley		X	X
Riverview		X	X
Shaler Area	X	X	
South Allegheny			X
South Fayette	X		
South Park			
Steel Valley		X	X
Sto-Rox	X		X
Upper St. Clair			
West Allegheny		X	
West Jefferson Hills		X	

(continued)

School District	Moral development is primary aim	Emphasis is placed on care	Emphasis is placed on values
West Mifflin Area Wilkinsburg Woodland Hills		X	

University Course Descriptions

Course descriptions from the 25 universities where Iron Hills teachers received teaching certifications from were also analyzed. Based on analysis of these course descriptions, most teachers have not received any training on moral development. Interviewee descriptions of their educational experiences confirmed that course descriptions accurately reflect what is occurring inside university classrooms. This lack of training suggests that teachers are not as prepared as they could be to advance student moral development in their classrooms.

Of the 25 universities, only five offer courses dealing with moral development. Duquesne University requires all students seeking a teaching certificate to take two courses that deal with moral development. Both are three-credit classes. Students seeking a Grades 4-8 English/Language Arts certification are required to take "Teaching Social Studies, Grades 4-8," which also touches upon moral development. See Appendix B for descriptions of these courses. 17 of the 107 teachers in the Iron Hills School District attended Duquesne University.

Penn State University offers one course that deals with moral development that fulfills an elective requirement for students wishing to receive a secondary certification. The course is called "Educational Theory and Policy." See Appendix B for the course

description. Seven of the 107 teachers in the Iron Hills School District attended Penn State, although none of them pursued a secondary certification there.

Chatham University offers two courses that address moral development. "Child development: Birth through grade 4" is for students pursuing a K-4 teaching certification, and "Adolescent Development" is for students pursuing a secondary teaching certification. So a teacher certified through Chatham University will take one course having to do with moral development. See Appendix B for descriptions of these courses. Three of the 107 teachers in the Iron Hills School District attended Chatham University.

Robert Morris University offers one course that addresses moral development. See Appendix B for the course description. One of the 107 teachers in the Iron Hills School District attended Robert Morris University.

Waynesburg College also offers one course that addresses moral development. "Introduction to Early Childhood" is for students pursuing an elementary certification. See Appendix B for the course description. One of the 107 teachers in the Iron Hills School District attended Waynesburg College. Below is a breakdown of the findings.

Table 3.4

Inclusion of Instruction Related to Moral Development at Universities Iron Hills School District Teachers Attended

University	Number of Iron Hills teachers certified through	Instruction on moral development?	Interviewee perspectives
California University of PA	19	No	Interviewee 3 stated she received no instruction having to do with moral development.
University of Pittsburgh	18	No	Interviewee 1 stated he received no instruction having to do with moral development.
Duquesne University	17	Yes. Students take at least two courses dealing with moral development.	Interviewee 4 said that content had a religious undertone to it. When asked, "Would you say moral?" the interviewee said, "I would say moral… I would say Christian morals… Catholic morals."
Edinboro University of PA	8	No	
Clarion University	7	No	
Penn State University	7	Yes. Teachers pursuing a secondary certification take a course dealing with moral development. No Iron Hills teacher received a secondary certification through Penn State.	Interviewee 5 said he received no instruction on moral development. He did, however, describe having to find examples of cooperation and courtesy during observations. He emphasized that he did not receive any instruction on anything having to do with moral development: "They don't tell you how."

(continued)

University	Number of Iron Hills teachers certified through	Instruction on moral development?	Interviewee perspectives
Carlow University	5	No	
Indiana University of PA	5	No	
Seton Hill University	5	No	
Point Park University	4	No	
Chatham University	3	Yes. Students take one course dealing with moral development.	Interviewee 2 said moral development was "touched on" from a psychological perspective. She was unable to expand on this.
West Virginia University	3	No	Interviewee 6 stated he received no instruction having to do with moral development.
Bethany College	2	No	
Slippery Rock University of PA	2	No	
Washington & Jefferson College	2	No	
College of Wooster	1	No	
Davis & Elkins College	1	No	
Kent State College	1	No	

(continued)

University	Number of Iron Hills teachers certified through	Instruction on moral development?	Interviewee perspectives
La Roche College	1	No	
Norfolk State University	1	No	
Robert Morris University	1	Yes. Students take one course dealing with moral development.	
St. Bonaventure	1	No	
VA Polytechnic Institute & St University	1	No	
Waynesburg College	1	Yes. Students pursuing an elementary certification take one course dealing with moral development.	
Westminster College	1	No	

Discussion

The data collected for this study indicates that Iron Hills teachers are unprepared to advance moral development. Few of the interviewees had any instruction that touched on moral development during their pre-service programs, and the instruction that teachers did receive seems to have failed to make a lasting positive impression. Despite this, these educators believe moral development is important and attempt to advance their students'

moral development inside their classrooms. Sometimes, their well-intentioned efforts run counter to research, as in the case of Interviewee 6 using behaviorist strategies to try to discourage immoral acts. In other cases teachers seem to unknowingly integrate research-based moral education instructional strategies, as in the case of Interviewee 4, who could serve as an example of what it means to model care, although she sees her actions in a different light.

The interviewees for this study agree that moral development is important and is something schools should work to advance. At the conclusion of his interview, Interviewee 1 said, "I guess the only thing I'll add is that it's interesting that we're having this conversation today, after what happened yesterday at Franklin Regional." The day before a high school student stabbed 20 of his classmates at Franklin Regional High School. Interviewee 1 went on to say that he did his student teaching there, and concluded:

> For a year that's where I was. . . . and if something like what happened yesterday at Franklin Regional… it just tells me that it can happen anywhere. And I think something like this is something that might help combat that kind of thing.

Level of Understanding

Pre-service preparation. Course descriptions from the colleges and universities that Iron Hills teachers attended indicate that most teachers received no instruction on moral development during their pre-service programs. Based on these course descriptions, colleges and universities offer little, and in most cases no, instruction on moral development. There are numerous references to social development, emotional development, and physical development in these course descriptions, which suggests that

the issue is not the level of granularity in these descriptions. However, it is possible the descriptions are inaccurate and that professors cover topics not included in the descriptions. Interviewees were questioned about their educational experiences, and they confirmed the accuracy of this study's findings regarding university emphasis on moral development, for the universities they each attended. For example, Interviewee 1 stated that he received no instruction having to do with moral development at the University of Pittsburgh: "There really wasn't anything I can think of about moral development of students… there were some things about ethical teaching practices, but nothing about helping students become more ethical or empathetic." This is consistent with the analysis of University of Pittsburgh course descriptions. Other interviewees similarly confirmed secondary data findings for their respective universities.

Defining moral education. Interviewees struggled to define moral education. Unlike with responses to other questions, all of the interviewees paused for extended periods of time when answering this question, and in some cases commented that it was a hard question before eventually responding. Responses varied considerably, which can possibly be attributed to the lack of training these individuals received. Some of the responses were lengthy, and a few were almost unintelligible, but below is the key point each interviewee made.

- ***Interviewee 1.*** "I would define it as preparing a student to become the best person they can be… a fully actualized person who has empathy for others and recognizes others as an end in themselves, and not just a means to an end."
- ***Interviewee 2.*** "Any sort of emphasis on how students, or even future teachers… perspective teachers – would teach students to be better people."

- ***Interviewee 3.*** "Learning strategies at a young age to build your own personal character and develop into a successful adult."
- ***Interviewee 4.*** "Moral education is teaching an individual or individuals right or wrong based on your ethics."
- ***Interviewee 5.*** "Moral education to me is knowing what's right and wrong on several different levels. On a social level – how to interact with people… how to present yourself in public – and you as a person interacting with others."
- ***Interviewee 6.*** "I feel it's the way you… the way that you run your classes – the morals that you were brought up with that you instill in your students. Pretty much the way you teach them."

There is no consensus among interviewees about moral education. Interviewees 1 and 2's responses are similar to what is found in literature, but both of these respondents have had significant experience with moral development or moral philosophy, beyond their pre-service training. As previously mentioned, Interviewee 1 studied philosophy with a concentration in ethics at the University of Pittsburgh, and Interviewee 2's doctoral dissertation related directly to moral development. Additionally, both of these interviewees recently attended professional development on Socratic questioning in which moral education was discussed. Interviewees 4 and 6 feel that moral education has to do with imparting your personal moral beliefs on your students, which is contrary to moral education literature.

Current State of Moral Education in the District

Despite the lack of training in their certification programs, interviewees believe that they are working to advance student moral development in their classrooms.

Interviewees 1 and 2 discussed efforts that are very much aligned with literature on moral education. For example, Interviewee 1 discussed efforts to incorporate moral development directly into instruction, noting that "the curriculum really seems to lend itself to it [moral development] in a language arts department." He also stated that, in class, they "talk about empathy and how you should treat other people," and he emphasized the importance of creating a safe and caring environment. He noted issues such as civil rights, racism, and prejudice and said:

> I try to get the students thinking about that… and the right ways and wrong ways to think about that – and why people act the way they do. So there definitely is an emphasis, at least in the 8th grade, on moral development, because of the two of us [himself and Interviewee 2], and it definitely comes out in the curriculum.

Interviewee 2 described using literature to advance student moral development, in a way very similar to what is advocated in moral education literature. Again, both of these teachers have had significant training in areas related to moral education, beyond their pre-service programs.

Interviewee 3 believes moral education is closely related to classroom management, and concluded that, since her classroom is under control, she is working to advance her students' moral development. While moral education literature does not run in this direction, the teacher makes an interesting point that relates to the literature indirectly. By setting clear expectations and boundaries for her students, and then holding them accountable, the teacher is providing straightforward instruction on moral matters, which is a component of Ethics of Care. Without even knowing she is doing it, the teacher also seems to model care, which is another component of Ethics of Care.

When asked why she thought teachers have a responsibility to advance moral development, rather than just focus on content, she replied:

> How are you going to focus on content when you've got a kid who doesn't have electricity? Do you think they're really worried about Pangaea? . . . I have a girl who reads on a first grade level – I have a girl who reads less than my daughter in first grade. And I'm supposed to teach her science? So what I try to do – teach her how to breakdown words – what's this say [points to a paper to demonstrate]? She's in 8th grade. So how am I going to make her believe she can be successful, if I don't let her accomplish something good?

Interviewee 5 talked about tying moral development in with regular instruction. He spoke specifically about discussing literature and using it to teach moral lessons. This is very similar to what Interviewee 1 discussed, although Interviewee 5 did not discuss this in nearly as much depth.

Interviewee 6 spoke of emphasizing specific values during physical education classes, because of their real world importance. He talked about sportsmanship and the importance of following rules. He also spoke of honesty:

> We're playing dodgeball – you have to be honest. There are four or five balls being thrown everywhere, and I might see somebody get hit with one – and somebody on the other end might get hit – and then you have people coming up, "Mr. [name], so-and-so was hit!" So I tell them at the beginning – if you can't be honest… if you're hit, just go sit down. You're going to get back in the game. And if I catch you cheating, then you're going to sit for longer then you would if you got hit.

Although this is well intentioned, research suggests that threatening to punish students in this way will not only not help advance a child's moral development, but may actually adversely impact it (Springer, 2008).

Responsibility to advance. When asked if schools have a responsibility to advance moral development, Interviewee 6 said that they definitely do, and continued:

> A lot of the homes – the kids growing up – they don't have those father/mother figures – they come home to empty houses sometimes. They don't get the – teaching the morals that they should actually have in school. . . . I think if we work with them on right from wrong, even though at this age they should really know right from wrong… but it's just… you don't see that all the time.

Interviewee 1 felt the same, and said, "I definitely think it's something they should do. Does that mean it's a responsibility? [Extended pause] That's something I really try hard to do. [Extended pause] Hedging a bit – define responsibility [laughs]." The question is rephrased, and he continues:

> I think unequivocally it's something that kids need, and that schools should provide. There are people who will say kids should get that at home or through their religious training… should-a, would-a, could-a… I think this is something that has to be done, and it has to be addressed in school. If it's in a support capacity to other ways… or… for a lot of kids it's the only thing they're going to get. It's beyond necessary.

Interviewee 1 works with general education students, most of whom are poor and live in a depressed and somewhat dangerous area. Interviewee 2, who works mostly with students from a working/middle class neighborhood, agrees that schools have a

responsibility to advance moral development, for similar reasons: "I think there are some students who do not experience that type of training at home. . . . I think we have a lot of students who may not necessarily be taught those skills… so I think that it's our job to teach them, to remind them, how to be moral."

The other interviewees agreed that schools have a responsibility to advance moral development, although Interviewee 4 emphasized that religion should be completely removed from the discussion. Interviewee 5 said, "It [moral development] shouldn't be a focal point – it should be promoted." He went on to explain the distinction by describing how moral education should be integrated into existing instruction, rather than taught in a stand-alone fashion. This stance is consistent with moral education literature.

Potential challenges. When asked about potential challenges, interviewees emphasized religion, challenges from students, the impact of socio-economic conditions, and boundaries.

Religion. Three interviewees brought religion up during their interviews, and in each case they saw a perceived connection between religion and morality as a serious potential challenge to advancing student moral development. Interviewee 4 attended Duquesne University, where, she said, "Content had a religious undertone to it." She returned to religion in numerous responses, each time emphasizing that it should be separated from any effort to advance moral development:

> I think schools have the – should play a role in the moral development, and the moral development and the pieces taught should be based on our constitutional rights… not necessarily the Ten Commandments if you're Catholic… our

> constitutional rights and the laws of our country and how to be productive members in our society – and not necessarily a religious based society.

It is interesting that the instruction she received at Duquesne, which emphasizes moral development to a greater extent than any of the other universities Iron Hills teachers were certified through, left such a bad impression on her in regards to moral education, because religion was so intertwined with instruction there.

Interviewee 1 also brought up religion:

> I think there's also challenges in terms of the community, and adults who see this as indoctrination – you're teaching kids a certain moral code. And I don't think that's at all what this should be… this should just be – What kind of a person do you want to be? What does it mean to be a good person? Not a particular moral code, or any kind of religious indoctrination. I think people are afraid of that. When they hear the term "moral" they immediately think religious, and they aren't the same thing.

Interviewee 2 also emphasized disconnecting any efforts to advance moral development from religion:

> I think it's our job to teach them… to remind them… how to be more moral. And I don't think… and I think people may connect "moral" with religious views or backgrounds, but I don't personally believe that a student who would have good moral development necessarily would make a connection with religious training or background.

Despite writing her dissertation on elevating student empathetic dispositions, she was extremely hesitant to use the word "moral" in her responses. When questioned about why she was so hesitant to use the word "moral" she responded:

> I think it's because some people would connect it with religion. . . . I do feel that most people in society, and maybe in education, would connect moral development with religious practice.

This response is especially noteworthy given her previous experience doing work directly related to moral development.

The emphasis interviewees place on religion is interesting, considering that religion is not emphasized in literature having to do with moral development or moral education. This possibly stems from the non-existent training teachers receive in their pre-service programs, and the lack of consensus about what moral education is, as previously discussed.

Challenges from students. Interviewees said one of the biggest challenges with efforts to advance moral development is trying to get through to the students. Interviewee 5, who teaches mostly poor students from a rough area, said:

> Some come with a skill set where they don't learn any kind of moral development. From a learning standpoint – you're going to mimic what you see. Now, growing up in different environments – some are better, some are worse. . . . Where there's less interaction, you're not going to know how to interact with people.

Interviewee 1, who also teaches students predominantly from a rough area, agreed:

> Well, there are challenges from the students. Obviously some of them find this to be an uncomfortable area to go, because they don't feel safe or they don't feel like they can offer their opinion or that they can really open up and be honest. I think a lot of kids put on a front… and to do this [actively participate in Socratic discussions about moral dilemmas found in literature], they have to tear down that front, or at least peak from behind it, and be *real*. And I think some kids find that really hard to do.

Interviewee 6 talked about a "pretty bad bunch" of students he had last year, who would constantly torment students in the class with severe disabilities. Despite "stopping all the time trying to correct their behavior," the teacher was never able to get through to them. He contrasted that class with one of his classes this year, where, "if we're playing kickball, they'll [students with severe disabilities will] kick the ball and they'll [other students in the class will] actually let him go to the base – just like, help them out." His point seemed to be that some students are very difficult to get through to, when it comes to matters of morality.

Impact of socio-economic conditions. Interviewee 3 emphasized the difference between students in the academic and general classes throughout the interview. As a science teacher, she teaches all of the students, and at one point during the interview she commented about the advanced teachers (whom she's close friends with) complaining about students:

> To hear them complain about a student who's an ace for me – you almost have to have another spectrum to appreciate what you have. I have a hard time listening

> to why they write someone up [disciplinary action], when that could be the least of my worries for the day.

Interviewee 5, who teaches general language arts, talked about his preparation to advance student moral development:

> I think the hang-up there is the disconnect between my experiences growing up and how I try to instill it in my own children, versus what their value set is and what's important to them. Sometimes it's a foreign idea – just general respect. . . . but I don't think a lot of times people – I think respect in different socio-economic areas – with different tiers of students – is different. Street cred might be more important to them – not being kind to a person, regardless of who they are.

Interviewee 1, who also teaches general language arts, spoke of attempting to create a safe and caring environment:

> That is one thing I try really hard to do – I know [Interviewee 2] does as well. I think a lot of us try to do that. It's very challenging to do that because so many of our kids don't know what that means… how to be supportive… how to engage with one another in a way that doesn't come down to put-downs. They don't know how to have self-esteem without tearing down someone else's self-esteem. So there are self-esteem issues – what's the right way to get self-esteem… the wrong way to get self-esteem… there's so much that needs to be done there.

Boundaries. Interviewee 3 feels strongly that there should be boundaries that teachers should not cross. She disapproves of any efforts to tell parents how to raise their children.

> Well, I'm a parent. It's like going to counseling – and you and I are in marriage counseling – and we're going to a counselor that's never been married and he's giving us advice on our marriage. . . . I don't care how much they teach you in a book – if you've never crossed that bridge, how are you doing it right?

She went on to ask how teachers, many of whom do not have children, can tell parents what to do. As the interview progressed, however, Interviewee 3 spent considerable time discussing how to reach out to parents. In the end, she felt parents should be part of the solution, and schools should "give them opportunities to come in and better themselves… educate themselves." But she drew the line at teachers telling parents what to do, or being critical of parenting approaches.

Interviewee 2 also brought up boundaries and discussed how some of the teachers she worked with while doing her dissertation research were critical of her work. One teacher thought she "was crossing a boundary… so that's another challenge… having other teachers, or other people in the school community, not being supportive for one reason or the other."

Interviewee 6, however, said there really should not be any boundaries at all. He concluded, "The same with their character – you can always do things that are going to help students out."

Chapter 3: Summary and Conclusion

Teachers in the Iron Hills School District are not as prepared as they could be to advance their students' moral development. Iron Hills teachers received no meaningful preparation on moral development in their pre-service programs and have varying degrees of understanding related to moral development. All interviewees believed that

schools have a responsibility to advance student moral development, which corresponds with findings that show districts in Allegheny County feel an obligation to advance it.

Interviewees were against the idea of moral education being taught in a stand-alone fashion. Rather, they believed moral education is something that should be integrated into everyday activities such as guided reading. They also made connections between moral education and establishing a caring classroom environment. These lines of thought are both consistent with the instructional implications discussed in Chapter 2.

Although moral education is not explicitly taught in the Iron Hills School District, it is clear that teachers, in their own ways, are doing what they can for their students' moral development. The findings presented here suggest that teachers could benefit from gaining a better understanding of moral education so that they can continue doing the things many of them already are doing, only do those things better.

Chapter 4: Design and Development

In this Design and Development Research project, teachers used human-centered design philosophy and methods as they conducted action research and worked to develop a model that conceptualizes how to integrate moral education into curriculum and instruction. This intervention was necessary because teachers lack training and guidance on how to go about bringing moral education into their classrooms. The planned intervention consisted of six phases: (1) recruitment, (2) professional development, (3) action research, (4) design and development, (5) synthesis and integration, and (6) dissemination. During the recruitment phase, teachers in the Iron Hills School District were recruited. The professional development phase consisted of a professional development workshop that focused on familiarizing teachers with research and literature related to moral education, moral development, and moral psychology. Teachers were also introduced to human-centered design philosophy and methods. During the action research phase, teachers conducted action research in which they integrated moral education into curriculum and instruction. Next, during the model-building phase, teachers worked together to develop a model that depicts how moral education can be brought into classrooms. Had multiple teams participated in this program, all participants would then have collaboratively developed a single model that conceptualizes how teachers can integrate moral education into curriculum and instruction during the synthesis and integration phase. Finally, findings would have been disseminated to the other teachers in the district and to the 41 other public school districts supported by the Allegheny Intermediate Unit.

Design and Development Research, one of six research types appropriate for educational research according to the U.S. Department of Education and the National Science Foundation, is described below (Earle, Maynard, & Neild, 2013). Then, human-centered design, which is the design philosophy that participants were trained on, is discussed. Next, the development of the intervention process model, depicted below, is described.

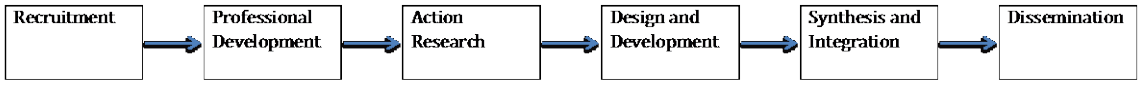


Figure 4.1. Key Intervention Components

Finally, research and literature having to do with (a) professional development, (b) action research, and (c) human-centered design methods is examined. This corresponds roughly with the (a) professional development phase, (b) action research phase, and (c) design-and-development and synthesis-and-integration phases of this intervention, although some of the content, such as that dealing with human-centered design methods, applied to multiple phases.

Design and Development Research

The U.S. Department of Education and the National Science Foundation (Earle et al., 2013) identified six research types that are appropriate for educational research:

1. Foundational Research
2. Early-Stage or Exploratory Research
3. Design and Development Research
4. Efficacy Research

5. Effectiveness Research

6. Scale-up Research

This intervention gave teachers the opportunity to participate in Design and Development Research. Design and Development Research projects "draw on existing theory and evidence to design and iteratively develop interventions or strategies, including testing individual components to provide feedback in the development process" (Earle et al., 2013, p. 9). The purpose of Design and Development Research is to develop an intervention to improve education (Earle et al., 2013). Outcomes include generating (a) a fully developed version of the proposed design-research, (b) a theory of action, (c) a set of intervention components, and (d) promising preliminary evidence (Earle et al., 2013). These outcomes will be discussed in Chapters 5 and 6.

Human-Centered Design Philosophy

Human-centered design is a philosophy from the field of design that places emphasis on empathy towards the people who will actually use the product being designed (Friess, 2010; Zoltowski, Oakes, Cardella, 2012). Human-centered designers continually interact with end-users and are guided by those interactions when designing solutions (Friess, 2010; Steen, 2012; Zoltowski et al., 2012). Whereas in the past only tangible artifacts were considered products by designers, today any outcome of such a process is considered a design product (Buchanan, 2004). In addition to being desirable, these products also have to be useful (Buchanan, 2004). Human-centered design philosophy was used in this study in order to increase the likelihood of the final model being both useful and useable.

Below I will (a) examine human-centered design from multiple perspectives; (b) discuss design expertise, including the unique characteristics of creative expertise and how design experts and novices differ; (c) review research on how to prepare designers; (d) examine the delicate nature of human-centered design; and (e) relate these ideas to this intervention.

Human-Centered Design from Multiple Perspectives

Human-centered design can be examined from multiple perspectives, including the philosophical perspective, historical perspective, socio-cultural perspective, and psychological perspective.

Philosophical perspective. Human-centered design is grounded in the idea that the "tacit, experiential, and intuitive reasoning of everyday interaction" will allow designers to design superior real-world products (Storkerson, 2010, p. 1). This is a pragmatic approach to design that rejects the supremacy of formal knowledge and places emphasis on naturalistic cognition, which is holistic rather than theoretical or systematic (Stockerson, 2010). Formal reasoning is not something people do naturally, easily, or well (Stockerson, 2010). Instead, people rely on naturalistic reasoning to get through the day. This relates to dual-process theory of moral judgment, which was discussed in Chapter 2. Studies supporting dual-process theory have shown that despite a societal preference for using formal reasoning when confronted with moral dilemmas, formal reasoning is often simply used to help an individual justify her immediate, emotional reaction (Greene, 2014; Hauser et al., 2007). While naturalistic thinking is inappropriate for some problems, such as complex chains of calculations, it is ideally suited for many others, including the design of certain educational interventions.

Historical perspective. Human-centered design can trace its beginnings back to the arts and craft movement in the late nineteenth century, and modern human-centered design arose in the 1980s at IBM (Friess, 2010). In 1983 researchers there developed a methodology that emphasized (a) end-user characteristics, (b) inclusion of end-users on the design team, (c) measurement, and (d) iterative approaches. A refined version of this was later reframed as a philosophy that placed emphasis on meeting the interests and needs of the end-user and on making usable products. This philosophy has made it a credible option for designers to consider users in the design process (Friess, 2010). Prior to this, design processes were either technology-centered or designer-centered, which led to products that were not user friendly.

Socio-cultural perspective. Calls for teacher-led reform efforts in K-12 education are grounded in ideas very similar to those that brought about human-centered design. Improving daily interactions between teachers and students is critically important yet very difficult to achieve (Tyack & Cuban, 1995). Studies suggest that reforms that are teacher-centered can be effective in bringing about this kind of change (DuFour & Marzano, 2011; Tyack & Cuban, 1995). In Allegheny County, there is a push for bottom-up, teacher-centered educational reform. The *Change Agents for Education Initiative* trains small groups of teachers and school leaders on human-centered design methods, which the practitioners then use to bring about needed change in their schools and districts (Pittsburgh Foundation, 2013). This initiative came about in response to the failure of top-down approaches to educational reform, which cost local foundations millions of dollars a year (J. Pearlman, Senior Vice President for Program and Policy, Pittsburgh Foundation, personal communication, June 25, 2014).

Psychological perspective. Having a better understanding of design expertise can help educational reformers and teachers bring about needed change inside classrooms. Studies of expertise often deal with well-defined problems having to do with particular endeavors such as playing chess and solving physics problems (Bransford, Brown, & Cockings, 2000). Design problems, on the other hand, can be vague, changeable, open to interpretation, and internally contradictory (Dorst, 2010). Design experts do not dwell on these problems. Instead they quickly begin to focus on solutions and move forward (Cross, 2004). These experts also reason generatively, rather than deductively (Cross, 2004).

Interestingly, both novice and expert designers usually stick with their initial design idea as long as they can, despite problems that may arise along the way. Ball (1990) conducted two studies in which he used qualitative methods to examine novice and expert design behaviors. In the first study, he interviewed and reviewed the journals of seven design students working on an extended design project. In the second study he video recorded six professional engineers as they thought aloud while working on a design project in a lab. Ball (1990) noted that in both cases the designers focused on initial solutions, which subsequent studies have confirmed (see Cross, 2004). Fixation on an initial concept is not necessarily problematic given the intrinsic nature of design and the importance of intuition (Cross, 2004), but this is why a breadth-first approach is preferable over the long term since it delays the designer's initial commitment to a single strategy (Ball & Ormerod, 1995).

Cross (2004) conducted three studies in which he examined the nature of design expertise. The first study was a protocol study in which he video recorded Victor

Scheinman, a well-known robotics engineer, thinking aloud over the course of a two-hour session as part of a controlled experiment in which he attempted to design a mechanism to attach a backpack to a bicycle. The other two studies were case studies, the first of Kenneth Grange, a respected industrial designer, designing a sewing machine; and the second of Gordon Murray, a well-known car designer, designing a race car. These three expert designers all took a breadth-first approach to the problem initially and framed the problem in distinct and personal ways. As Ball's (1990) study suggested, these designers remained fixated on a single solution once it was conceived. Cross (2004) concluded that the conflict between the designers' high-level goals and more practical considerations led to creative design. Similarly, teachers have to consider many practical constraints, such as time, student behavior, and district mandates, as they work towards more high-minded goals. This conflict has an impact on everyday instruction and will certainly influence efforts to integrate moral education into curriculum and instruction. These studies are noteworthy because they reinforce the idea that breadth-first approaches are preferable due to the designer's tendency to fixate on the initial solution they come up with. These studies also show that personal experiences and intuition are appropriate design considerations. This relates to research dealing with child development showing that, when working with children, doing what comes naturally is often the best approach (Aamodt & Wang, 2011).

Preparing Individuals for Human-Centered Design

Design can be taught (Buchanan, 2004), and this intervention scaffolded teachers to use the same techniques as expert designers. Gulliksen, Goransson, Boivie, Blomkvist, Persson, and Cajander (2003) conducted a case study using an action research

approach in which they identified key design principles. The project took place within the Swedish National Tax Board and dealt with the development of a new computerized case-handling tool. The authors collected data through observations, semi-structured interviews, and continuous discussions. They also made use of human-centered design methods, including collaborative prototyping and personas. Gulliksen et al. (2003) identified key design principles, including (a) active involvement of the user, (b) evolutionary development of the initial conception, (c) simple design, (d) prototyping, (e) evaluation in context, (f) explicit design activities, (g) holistic design, and (h) process customization. Teachers applied these design principles during this intervention.

Zoltowski, Oakes, and Cardella (2012) conducted semi-structured, open-ended interviews with 33 design students from a number of academic disciplines to see how individuals understand and experience human-centered design. They specifically sought to understand variations in how students understood and experienced human-centered design. Zoltowski et al. (2012) used the methodology of phenomenography, a qualitative research approach that focuses on variations in ways individuals experience a phenomenon, to investigate the qualitatively different ways in which students experience and understand human-centered design in the context of designing for others. The authors identified seven distinct ways in which students understood and experienced, in the first two cases mistakenly, human-centered design.

1. Technology-centered. Design is not human-centered and lacks both an understanding and appreciation of the user.

2. Service. Students work to help others, but without using design processes and methods.

3. User as information source. Users are a source of information and their needs are not considered in design.

4. User needs considered. Information about the users is gathered indirectly, rather than from the users themselves.

5. User needs and broad context considered. In addition to user needs, the broader political, social, or environmental context is also considered.

6. User needs are considered from multiple perspectives. Users are involved in the design process and their perspectives are considered.

7. Empathetic design. An understanding of users, beyond the scope of the specific project, is developed through informal and social interactions.

The authors found that immersive experiences helped students to more comprehensively understand human-centered design and that students both enjoyed and learned from reflective exercises (Zoltowski, 2012). This study was conducted in an academic context and the results may not be generalizable to individuals working in a professional context. Further, most of the participants in the study were engineering students and likely were more familiar with design philosophy and methods than K-12 teachers will be. As the current study was carried out, these potential limitations were considered.

The Delicate Nature of Human-Centered Design

It can be very difficult for designers to involve users and empathize with them. In the previously discussed study, Gulliksen et al. (2003) found that even when initially committed to usability, obstacles arise throughout the development process. Major problems included (a) designers simply ignoring the needs and goals of the users, and (b)

meeting project deadlines at the expense of achieving even a minimum level of usability (Gulliksen et al., 2003). Steen (2012) conducted two studies in which he researched why these kinds of problems arise. He served as a participant observer and attempted to improve design practices by showing what normally remains hidden during the process of interactions between designers and users. Steen (2012) sought to deconstruct human-centered design, question implicit assumptions, and consider other solutions in order to foster cooperation and critical reflection. He specifically explored the assumption that designers can be open towards others. In the first study Steen (2012) participated in and deconstructed four co-design workshops conducted with different groups of police officers. Reflection led Steen (2012) to recognize the ways in which the design team, of which he was a member, privileged their ideas over the police officers'. For example, during the first workshop the team of designers and police officers identified four areas that were problematic. Afterwards, however, the designers chose to focus on one area that they were comfortable with. During the second workshop the designers discounted the practical problems that the police officers identified. Steen (2012) suggests that, in order to balance the needs of designers and practitioners, designers should reflect on the human-centered design process and on their role in the process. Simply put, designers should empathize with the people they work with, and training teachers on human-centered design may help avoid the problems Steen describes.

Research and Human-Centered Design

Designers need training on research methods so that they are prepared to be objective, produce generalizable results, and relate their research findings to design outcomes (Hanington, 2010). Research methods used in other disciplines can be adapted

for use in human-centered design (Hanington, 2010). Because of the iterative nature of human-centered design (Friess, 2010), the research methods used are generally streamlined versions of the methods used in other disciplines (see, for example, *Human Centered Design Toolkit*, 2009; *Innovating for People: Handbook of Human-Centered Design Methods,* 2012). Innovative research methods, such as cognitive maps, visual artifacts, and design workshops, are creative, participatory, and generally specifically applicable to design research (Hanington, 2003).

In a school context, integration of human-centered design and research will require the researcher to work with teachers collaboratively. Researchers supporting collaborative teacher-led action research have successfully done this. Researchers in England supported a collaborative action research group in which teachers identified the problems; the researchers described relevant theories; the teachers chose a theoretical framework and developed materials and approaches; the teachers implemented their interventions; the researchers supported the teachers in evaluating the intervention; and there was a collaborative discussion focused on better understanding the issue (Haggarty & Postlewaite, 2003). Although emphasis was not placed on human-centered design methods per se, the researchers showed empathy for the teachers throughout this project. Teachers and researchers adopted complementary roles by taking on tasks that they were ideally suited for, with the researchers recognizing and respecting the teachers' expertise; and the group was able to successfully address a range of issues in the school (Haggarty & Postlewaite, 2003).

Implications

An understanding of human-centered design philosophy helped to more tightly intertwine what were somewhat disconnected components of this intervention. The early versions of this intervention did not seriously consider end-users (i.e., teachers). Human-centered design philosophy brought about a shift in mindset so that end-users themselves ended up being the ones who designed the product. Additionally, participating teachers were introduced to human-centered design philosophy and methods during professional development, and they were supported as they used this knowledge to bring moral education into their classrooms.

Ideas from the reviewed literature guided the ongoing refinement of this intervention. The designer's tendency to fixate on an initial solution led to the adoption of a breadth-first approach to professional development in which teachers considered moral education from a number of perspectives before being introduced to a variety of potential ways to go about integrating moral education into curriculum and instruction. The initial action plans that teachers developed were more important than originally anticipated, since research suggested that the teachers would remain fixated on these initial plans. Therefore, additional time was devoted to helping teachers develop a broad understanding of moral development before they moved on with their action research planning.

It was also important that teachers empathized with non-participating peers. Since in this study it was end-users themselves who developed the product, this was not an anticipated issue initially. However, participating teachers had to keep their peers in mind and work to ensure, by interacting with nonparticipants, that the model they developed was both useful and usable. Finally, the literature made it clear that no matter

how hard designers try to remain human-centered and empathetic, conflicts will arise, and those conflicts will often be difficult to notice. A balance had to be struck between meeting academic requirements and ensuring that the finished product was something that teachers could and would actually use. With these ideas in mind, an intervention process model was developed.

Intervention Process Model

The purpose of this intervention was to support teachers as they worked to develop a model that conceptualizes how to integrate moral education into curriculum and instruction, and human-centered design philosophy was used to develop the following process model to support teachers as they work collaboratively to do this.

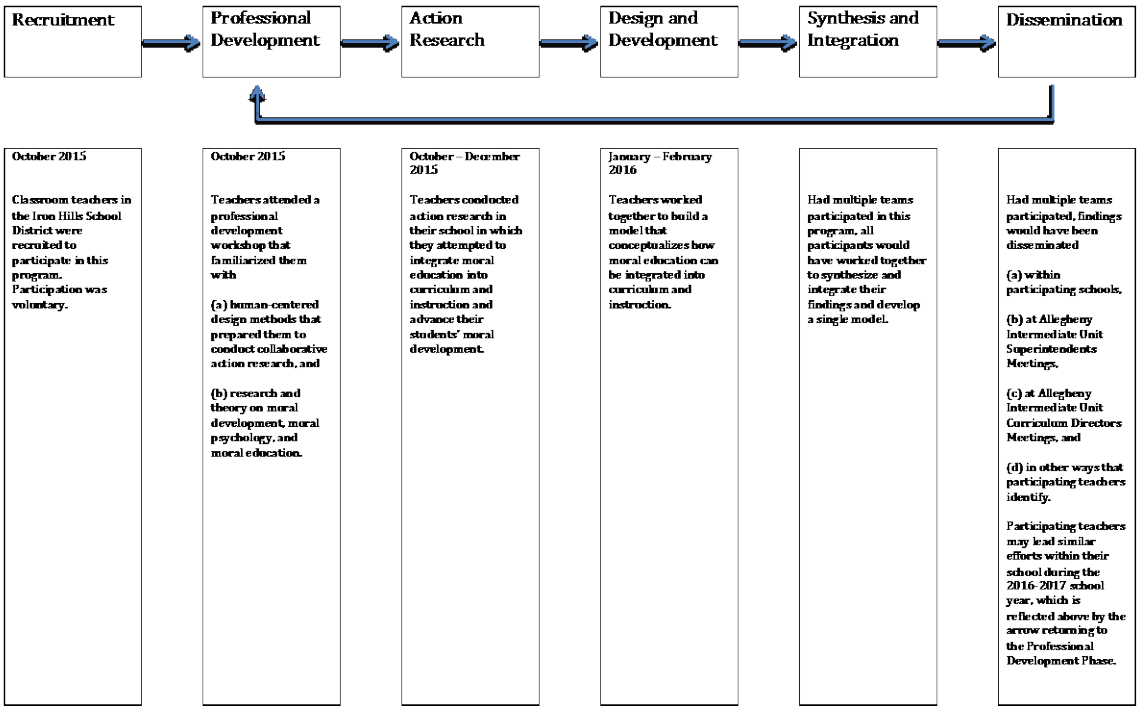


Figure 4.2. Intervention Process Model

The process model above was adapted from a series of process models developed by Fletcher, Zuber-Skerritt, Barlett, Albertyn, and Kearney (2010) that were based on reflection and meta-action research. The models emphasized action research and, as will be discussed in greater detail later in this chapter, action research is relevant to this study for a number of reasons, including:

- Action research is one of only three differentiated supervision options recommended by the Pennsylvania Department of Education (Pennsylvania Department of Education, 2013).
- Action research is emphasized within the teacher evaluation framework being used throughout the state (Danielson, 2011).
- The action research process is aligned with the characteristics of high-quality professional development identified by the National Center for Teacher Quality and the National Staff Development Council (Archibald, Coggshall, Croft, & Goe, 2011; Wei, Darling-Hammond, & Adamson, 2010).
- The action research process is empowering, fosters reflection, is transformative, and is appropriate for adult learning (Cranton, 2010).

After leading a professional development program to help teams reduce poverty in six African countries, Fletcher et al. (2010) developed a process of professional learning that informed this intervention. They examined how meta-action research can transform thinking about how to improve professional practice (Fletcher et al., 2010). In order to answer this question the authors did action research *on* action research (i.e., meta-action research). They used qualitative methods to conceptualize action research processes that lead to transformative learning. Through analysis of their personal

reflections, the reflections of participants in the study, and their observations, the authors found that meta-action research is transformative, rewarding, and leads to professional growth.

The process models the authors developed included a reflection model, a meta-action research model, and a lifelong learning model. The reflection model consisted of four phases: (1) pre-action, (2) in-action, (3) post-action, and (4) pro-action. The authors described, in detail, their experiences within each phase of this process. The meta-action research model also consisted of four phases: (1) action research; (2) reflecting on action research; (3) meta-reflection, which has to do with reflecting on previous reflections; and (4) design and development. The final model the authors discussed embeds the reflection model within each phase of the meta-action research model. Aspects of each of these models have been incorporated in the process model used for this intervention, depicted previously in Figure 4.1.

The authors developed the process models by generalizing inferences from their qualitative findings. Because of the small scope of action research, some academics have argued that action research findings are impossible to generalize (Cain & Milovic, 2010; Diana, 2011; Foshay, 1994). But an alternative view is that generalizations from individual cases are possible and that knowledge developed from action research is transferrable across contexts (Greenwood & Levin, 1998). As Greenwood & Levin (1998) state:

> Transferring knowledge from one context to another relies on understanding the contextual factors in the situation where the inquiry took place, judging the new context where the knowledge is supposed to be applied, and making a critical

assessment of whether the two contexts have sufficient processes in common to make it worthwhile to link them (p. 253).

The action research discussed by Fletcher et al. (2010) dealt with a leadership development program in South Africa. Although there are dissimilarities between this and efforts to advance student moral development in Western Pennsylvania, in both cases the aims of the action research initiatives included the personal growth of participants and product development. An assumption made in this study was that the fundamental human contexts in these two environments were sufficiently similar to use an *adapted* process model for this intervention.

The adaptations were significant and were made with K-12 teachers in mind. An example of an adaptation that was made is that rather than embed the reflection model within the meta-action research model as the authors did, in this study the meta-action research model was embedded within the reflection model. This study is also relevant because participating teachers collaboratively developed a model to integrate moral education into curriculum and instruction in order to advance student moral development. In doing so they followed a process similar to the one Fletcher et al. (2010) went through, although, again, the process was adapted for a K-12 setting. Adaptations were made with the characteristics of high-quality professional development in mind in an attempt to better support participating teachers.

Professional Development

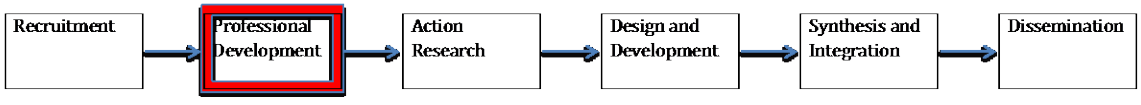


Figure 4.3. Professional development. The intervention process model will be used throughout the remainder of this chapter to track how the content discussed fits within the larger framework.

In the 19th Century, teachers working in isolated schoolhouses had few opportunities to work collaboratively with their colleagues. They learned through trial and error and, despite reflection and seeking out opportunities to improve their practice, these teachers lacked a theoretical understanding of content, teaching methods, and child development (Elster, 1993). Teacher professional development left much to be desired. While much has changed in K-12 education since then, schools across the United States continue to emphasize ineffective professional development models that are disconnected from practice, non-collaborative, and have little impact on student achievement (Wei et al., 2010). Examples of this type of professional development include seminars and conferences. This misguided emphasis on activities unsupported by research leaves little time for high-quality professional development activities, which are supported by research and employed in nations that have high-achieving educational systems (Wei et al., 2010). This is unfortunate since high-quality professional development has been shown to both improve school culture and lead to advances in student achievement (Marzano, Walters, & McNulty, 2005).

Theoretical Framework

Three trends are contributing to moving K-12 schools away from the ineffective professional development that has, unfortunately, become the norm (Ubben, Hughes, & Norris, 2007). First, results matter more than ever before. Professional development

efforts must now impact teacher instruction in a way that leads to advances in student achievement (Ubben et al., 2007). This is best understood from the economic perspective, which emphasizes results. Economics is the study of scarce resources (Frank & Bernanke, 2004; Krishnan, 2009; Vignoles, 2009), and because school resources, including teacher time, are scarce, administrators have to make them count. An increased emphasis on results is due, in large part, to the fact that districts are being held accountable for student outcomes to a greater extent than ever before (Boser, 2012). Because of this, districts need to get the most out of whatever professional development they offer (Vignoles, 2009). Second, professional development must have a broad impact (Ubben et al., 2007). This trend places emphasis on expecting teachers to use what they learn in multiple contexts, which enables districts to get the most out of their professional development efforts. In this study participants learned about a wide range of topics, including moral education, moral development, moral psychology, human centered design, and action research. Not only are participants able to apply the knowledge they acquired in a variety of contexts, but they are also prepared to train other teachers on these topics, further broadening the impact of the professional development they received. Third, high-quality professional development is based on the constructivist idea that learning is an active and collaborative process (Ertmer & Newby, 1993; Ubben et al., 2007).

High-quality Professional Development

It is difficult to overstate the importance of high-quality professional development. The National Staff Development Council introduced a technical report by stating:

> Effective professional learning – which enables teachers to work regularly together to improve their practice and implement strategies to meet the needs of their students – must be a key ingredient in any effort to bolster student achievement (Wei et al., 2010, p. ii).

There is consensus that this is the case, with researchers agreeing that a high correlation exists between teacher professional development and student academic success (Yoon, 2007). According to the National Center for Teacher Quality and the National Staff Development Council, high-quality professional development is aligned, focused, active, collaborative, continuous, and reviewed (Archibald et al., 2011; Wei et al., 2010).

Aligned. Alignment of goals and activities produces results (Archibald et al, 2011; Foord, 2012; Wei et al., 2010). In this study teachers integrated moral education with existing curriculum, aligning these efforts with what is going on inside classrooms. These efforts are also aligned with components of the Brain Targeted Teaching Model (Hardiman, 2012; see Figure 2.1). Additionally, these professional development efforts are aligned with major educational initiatives occurring in Pennsylvania, including the use of the Danielson framework for teacher evaluations and a shift towards differentiated growth options for teachers.

Alignment with Danielson Framework. Danielson's (2007) *Framework for Teaching* is being used for teacher evaluations across Pennsylvania. As part of the evaluation process, teachers are responsible for providing evidence that they are fulfilling 22 responsibilities of effective teaching. Within this framework it is difficult to gather evidence at the distinguished level. Danielson (2007) highlights this when she quotes educators who have said, "Distinguished-level performance is a good place to visit, but

don’t expect to live there” (p. 41). The professional development that was part of this study provided teachers with evidence that they were fulfilling up to 11 of the responsibilities at a distinguished level. While having evidence at a distinguished level does not guarantee a distinguished rating for that responsibility, having this type of evidence is a necessary condition to be ranked at a distinguished level. This alignment can be seen in the table below.

Table 4.1

Alignment with Danielson Framework for Teaching

Element of Teaching	Distinguished Level Explanation / Critical Attributes (quoted directly)	Evidence from Intervention
1b. Demonstrating knowledge of students	The teacher uses ongoing methods to assess students' skill levels and designs instruction accordingly.	Teachers will formatively assesses student moral development during cyclical action research and adjust instruction accordingly.
1d. Demonstrating knowledge of resources	The teacher pursues apprenticeships to increase discipline knowledge.	Teachers will increase their knowledge of child development and instructional practices by voluntarily participating in this professional development.
2a. Creating an environment of respect	Classroom interactions among the teacher and individual students are highly respectful, reflecting genuine warmth and caring and sensitivity to students as individuals.	Teachers may model appropriate empathetic reactions, provide students with opportunities to practice caring, and respond appropriately when students act in non-caring ways.
2b. Establishing a culture for learning	The classroom culture is a cognitively vibrant place, characterized by a shared belief in the importance of learning.	Teachers may integrate Socratic dialogues throughout the curriculum.
2d. Managing student behavior	Teacher's response to student misbehavior is sensitive to individual student needs, respects students' dignity.	Teachers may respond more appropriately when students act in non-caring ways. These responses will be grounded in brain science research.

(continued)

Element of Teaching	Distinguished Level Explanation / Critical Attributes (quoted directly)	Evidence from Intervention
3b. Using questioning and discussion techniques	Teacher uses a variety or series of questions or prompts to challenge students cognitively, advance high level thinking and discourse, and promote meta-cognition.	Teachers may integrate Socratic dialogues throughout the curriculum. Teachers may also incorporate reflection into instruction.
3c. Engaging students in learning	Virtually all students are intellectually engaged in challenging content through well-designed learning tasks and suitable scaffolding by the teacher. Learning tasks and activities are fully aligned with the instructional outcomes.	Teachers may incorporate Socratic questioning into instruction, which, if done correctly, will cognitively challenge all students in the class.
3d. Using assessment in instruction	Teacher monitoring of student understanding is sophisticated and continuous: the teacher is constantly "taking the pulse" of the class.	Teachers will formatively assess students during cyclical action research, and adjust instruction accordingly.
4a. Reflecting on teaching	Teacher makes a thoughtful and accurate assessment of a lesson's effectiveness and the extent to which it achieved its instructional outcomes.	Teachers will reflect as part of the action research process.
4d. Participating in a professional community	Teacher volunteers to participate in school events and district projects, making a substantial contribution, and assuming a leadership role in at least one aspect of school or district life.	Teachers will voluntarily participate in a professional learning community and will serve as subject-matter experts on moral education, human-centered design, and action research.

(continued)

Element of Teaching	Distinguished Level Explanation / Critical Attributes (quoted directly)	Evidence from Intervention
4e. Growing and developing professionally	Teacher seeks out opportunities for professional development and makes systematic effort to conduct action research. Teacher initiates important activities to contribute to the profession.	Teachers will voluntarily participate in professional development requiring significant amounts of time each week.

(Danielson, 2011)

Alignment with differentiated growth initiative. The Pennsylvania Department of Education is also placing increased emphasis on differentiated growth options for teachers as part of the supervision and evaluation process (Pennsylvania Department of Education, 2013). A shift towards differentiated and self-directed teacher growth is not only happening in Pennsylvania, but across the country (Nolan & Hoover, 2004). This is because of the growing recognition that teacher needs are determined by their experience and readiness (Ubben et al., 2007). Examples of self-directed growth options include reflective journals, serving as teacher leaders, peer coaching, action research, study groups, and participation in professional learning communities (Blank, 2006; Nolan, 2004). Participants in this study conducted action research, which is one of three differentiated growth options recommended by the Pennsylvania Department of Education (2013).

Focused. This study was narrowly focused on supporting teachers as they worked to develop a model that conceptualizes how to integrate moral education into curriculum and instruction. However, as previously discussed, high-quality professional

development must have a broad impact. While the focus of this intervention was narrow, what teachers learned can be broadly applied. Teachers can integrate the techniques they were trained on across the curriculum, including in ways that have nothing to do with moral education. Human-centered design, in particular, can be applied in a variety of contexts. Training teachers on specific teaching strategies that they will actually put into practice, and preparing them to make connections and incorporate these strategies in a variety of ways, are key components of high-quality professional development (Blank, 2013).

Active. Constructivism and cognitivism both emphasize the active nature of learning (Ertmer & Newby, 1993), so it is no surprise that the most effective professional development activities emphasize active participation and engagement. The most obvious example of this is when teachers actually use what they learn inside their classrooms, but other examples include teachers observing other teachers, conducting demonstration lessons, and leading discussions (Archibald et al., 2011). From action research to design and development, there was a heavy emphasis throughout this intervention on knowledge application.

Collaborative. High-quality professional development programs emphasize collaboration among teachers (Archibald et al., 2011; Blank, 2013; Wei et al., 2010), and teachers collaborated throughout this study.

Continuous. Research suggests that more than 30 hours of high-quality professional development is necessary to positively impact student achievement (Archibald et al., 2011; Blank, 2013; DuFour & Marzano, 2011). In this study,

participating teachers spent a significant amount of time participating in professional development activities, as will be discussed in Chapters 5 and 6.

Reviewed. Teachers conducted cyclical action research in which they constantly evaluated and adjusted their plans. Teachers also invited stakeholders to review and critique their model. Finally, data was qualitatively analyzed after each phase of the intervention. This will be discussed in Chapter 5.

Action Research

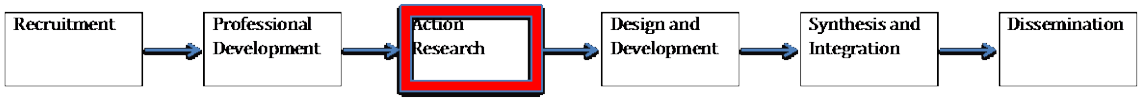


Figure 4.4. Action research.

It would be a mistake to think that the professional development associated with this intervention consisted simply of what took place during the professional development workshop. Rather, teachers were supported throughout the entire intervention, including as they conducted action research, which is itself a high-quality professional development activity. Action research is an approach to the research process that emphasizes solving real world problems, ideally in a collaborative fashion. By emphasizing the direct and immediate application of research, action research builds a bridge between research and practice. This is especially important in the field of education, where the chasm between the two is considerable (West, 2011). Although teacher-led action research is far from widespread in K-12 education, recent emphasis on action research on teacher evaluation rubrics (Danielson, 2011), and within differentiated supervision models (Pennsylvania Department of Education, 2013), suggests an increase

in the number of teacher-led action research projects is likely. Teacher-led action research is a high-quality professional development activity that is aligned, focused, active, collaborative, continuous, and reviewed. As with other high-quality professional development activities, action research produces positive outcomes (Hans-Vaughn & Yanowitz, 2009), has a broad impact (Nolan & Hoover, 2004), and is grounded in constructivism (Bransford, Brown, & Cockings, 2000).

Action research attempts to solve real world problems. It extends beyond the implementation stage of research and, in order to do it right, the entire research process, from beginning to end, has to be approached with action research in mind (Glassman, Erdem, & Bartholomew, 2013; Jaipal & Figg, 2011; O'Leary, 2012). While implementation itself is essential, action research also encompasses problem identification and research strategy selection (O'Leary, 2012). Action research is not a method, but rather an approach to the research process (West, 2011). Greenwood and Levin (1998) make the case that action research not only is *real* research, but is superior to traditional social science research because it is more closely linked with basic and applied science methods, is more likely to produce useful and reliable information, and is more likely to provide solutions to practical problems. Action research bridges the well-documented gap between education research and practice (Diana, 2011; Foshay, 1994), and it also has profound positive effects on participants (Diana, 2011; Feldman & Weiss, 2010; Hardy & Rönnerman, 2011).

Teacher-led Action Research from Multiple Perspectives

Action research can be considered from the historical, socio-cultural, economic, and psychological perspectives.

Historical perspective. Kurt Lewin, a social psychologist, did work in the 1940s on action research, which Stephen Corey brought into schools (Hardy & Ronnerman, 2011). In 1949, Corey predictively said, "I have the strong personal conviction that improvement in educational practices and curriculums will continue to be exceedingly slow and involve discouraging regressions until the time comes when a large number of individuals and groups are engaged in numerous action research studies" (p. 153). That time has yet to arrive.

Action research did become more widespread in educational circles in the 1960s and 1970s, when teachers were beginning to be recognized as professionals (West, 2011). Today, however, action research is far from widespread in K-12 settings (Nolan & Hoover, 2004). That is beginning to change as teacher evaluation rubrics, such as Danielson's Framework, begin to emphasize action research (Danielson, 2011); and differentiated growth options that include action research become more common (Pennsylvania Department of Education, 2013). The socio-cultural perspective provides an explanation as to why action research is relatively uncommon.

Socio-cultural perspective. In many professions, such as law and engineering, there is considerable overlap between research and practice; but this is not the case in education, where researchers and teachers have been clearly distinguished since the 1930s (West, 2011). Action research can help bridge this divide (Bradley-Levine, Smith, & Carr, 2009; Diana, 2011; Foshay, 1994). Action research is aimed at bringing about social change and, in some cases, at weakening traditional power structures (West, 2011). Although most academics do not take things this far, they do recognize the tension between teachers and researchers (Foshay, 1994; West, 2011).

History has shown that teachers can simply shut their classroom doors to initiatives pushed upon them, although this can be avoided by helping teachers flexibly adapt instructional recommendations to meet local needs (Tyack & Cuban, 1995). A key reason why this type of instructional change is so effective is that it represents a new mode of knowledge creation that occurs outside of academic and disciplinary contexts and is focused on direct application (Krishnan, 2009).

Economic perspective. Managerial approaches to research, in which teachers are seen as pieces in an outside researcher's puzzle, do not work (Hardy et al., 2011). Managerial approaches to research are understandable, considering that the purpose of education is currently narrowly defined in economic terms and there is a heavy emphasis on accountability and measurement in K-12 education (Basu, 2013; Mehta, 2013a; Mehta, 2013b). However, if the purpose of research is to impact practice, managerial approaches miss the mark due to the researcher-practitioner tension previously discussed.

Looked at from a different angle, action research yields a range of benefits, including improving a specific aspect of practice. Additionally, action research brings about general benefits, including an increase in the participating teachers' pedagogical knowledge, content knowledge, and leadership skills; and an increase in the knowledge base in education (Hahs-Vaughn & Yanowitz, 2009). Action research also leads to improvements in school culture and interpersonal relationships among teachers (Hahs-Vaughn et al., 2009; Nolan & Hoover, 2004). Finally, action research helps teachers adopt an inquiry stance, which is associated with an inclination towards improvement and reflective practices (Nolan & Hoover, 2004).

Psychological perspective. The psychological perspective helps us understand why action research works. Constructivism emphasizes the construction of meaning from prior experiences (Bransford, Brown, & Cockings, 2000; Ertmer & Newby, 1993). Individuals do this by building task-specific knowledge structures (Ernest, 2010). Constructivism places considerable emphasis on the learner being able to flexibly construct meaning in order to accomplish a task. It is the process, rather than the content, that is emphasized (Ertmer & Newby, 1993). This idea had important implications for this study. Due to the current state of K-12 moral development research, the *process* (action research) proved to be just as important as the *content* (research-based moral development strategies). This is because moral education strategies identified by psychologists and untested by teachers in K-12 classrooms had to be adapted in order to meet student needs.

What is Action Research?

Action research generally takes on practical problems (Nolan & Hoover, 2004; O'Leary, 2012). These problems, however, are usually much more complex than the ones traditional social science research normally deals with (Greenwood & Levin, 1998). The action research process is cyclical, with potential solutions leading to a reframing of the problem, followed by a continued movement forward (Diana, 2011; Glassman et al., 2013; Jaipal & Figg, 2011; Milton-Brkich, Shumbera, & Beran, 2010). In addition to dealing with complex problems, action research can take on controversial ones as well. Action research is ideally suited to investigate the problem of how to advance student moral development in practice. It is a "quiet initiative" that emerges from, and is

contained within, a classroom context; which greatly reduces the tension often associated with K-12 moral education (Silva & Gimbert, 2001, p. 28).

Action research defined. Action research is described as a strategy aimed at taking on real-world problems in order to bring about knowledge or action (O'Leary, 2014). In educational leadership texts, emphasis is placed on having teachers ask and answer questions directly related to their practice (Nolan & Hoover, 2004). While many scholars agree on the basics of what action research is all about, they put emphasis on different aspects of it. For example, some authors place emphasis on the social nature of action research, or on the importance of bringing about social change (Glassman et al., 2013; West, 2011). Numerous authors stress the importance of integrating theory and practice (Adomaitienė, Zubrickienė, & Teresevičienė, 2008; López-Pastor, Monjas, & Manrique, 2011; O'Leary, 2012). Others discuss the importance of being able to replicate action research processes (Bradley-Levine, Smith, & Carr, 2009). Some also emphasize reflection (Milton-Brkich et al., 2010). Despite these subtle differences, all of these authors place considerable emphasis on impacting practice and solving real world problems.

Stress is also placed on the collaborative nature of action research (Bradley-Levine et al., 2009; Feldman & Weiss, 2010; Jaipal & Figg, 2011; Milton-Brkich et al., 2010; O'Leary, 2012). This is surprising, as neither the Danielson Framework nor the Pennsylvania Department of Education emphasize this in their discussions of action research (Danielson 2011; Pennsylvania Department of Education, 2013). These omissions could potentially lead to yet another research-practice gap. Along these same

lines, the cyclical nature of action research is stressed in literature, but omitted in the Pennsylvania teacher evaluation rubric and differentiated supervision guide.

Usefulness of action research. Action research improves teacher effectiveness (Diana, 2011; Hahs-Vaughn, & Yanowitz, 2009; Hardy, & Ronnerman, 2011). It also improves school culture (Hahs-Vaugh & Yanowitz, 2009; Hardy & Ronnerman, 2011). But the usefulness of action research is perhaps most easily understood when action research is contrasted with orthodox social science research. Greenwood and Levin (1998) argue that action research is superior to traditional social science research, which they equate to philosophical speculation because of the inherent disconnect between research and social action. Social *inaction*, they argue, is an essential methodological rule of orthodox social science research, which is a problem. "It appears to us that academic social researchers are often content to redefine reality to make it simpler to handle, more suited to theoretical manipulation, and to make the social scientist's life easer to manage" (Greenwood & Levin, 1998, p. 251). Action research does not accept these trade-offs and is thereby able to take on problems that are more complex than problems traditional social science research is able to handle (Foshay, 1994; Greenwood & Levin, 1998).

Who is conducting teacher-led action research? Teachers who conduct action research generally have had very little training on how to conduct research (Hahs-Vaughn & Yanowitz, 2009). Perhaps because of teachers' limited research training, action research is initially the least popular differentiated supervision option, although it grows in popularity if it is supported (Nolan & Hoover, 2004). Such support is essential (Hahs-Vaughn & Yanowitz, 2009; Milton-Brkich, Shumbera, & Beran, 2010; and Sullivan &

Glanz, 2000). Without established support structures in place, action research projects almost always fail (Sullivan & Glanz, 2000).

Private school teachers are more likely than public school teachers to participate in action research, and teachers are more likely to participate if they are given time to participate in professional development activities and have a mentor or coach to work with (Hahs-Vaughn & Yanowtiz, 2009). Teachers participate in action research when they are invited to do so at a time when they are prepared to take on a new challenge (Slepkov, 2008). Conditions that support high-quality action research include time and support, intellectual challenge, established routines, and autonomy (Cain & Milovic, 2010).

Action Research as High-Quality Professional Development

Teacher-led action research embodies the characteristics of high-quality professional development in that it is aligned, focused, active, collaborative, continuous, and reviewed.

Aligned. Action research is aligned with both the teacher evaluation and differentiated growth initiatives in Pennsylvania (Danielson, 2007; Pennsylvania Department of Education, 2013).

Focused. Action research projects should be narrowly focused on a specific problem of practice (Nolan & Hoover, 2004).

Active. Action research is, obviously, active. Additionally, teachers observing other teachers, conducting demonstration lessons, and leading discussions are active professional development activities (Archibald et al., 2011), and all of these activities can be incorporated into teacher-led action research.

Collaborative. Collaboration is an essential part of action research (Bradley-Levine et al., 2009; Feldman & Weiss, 2010; Jaipal & Figg, 2011; Milton-Brkich et al., 2010; O'Leary, 2012).

Continuous. Action research is a cyclical, continuous process (Diana, 2011; Milton-Brkich et al., 2010; O'Leary, 2012; West, 2011).

Reviewed. Action research results need to be reviewed in order to determine if the solution solves the identified problem (Greenwood & Levin, 1998).

Conducting Teacher-led Action Research

A teacher friendly approach to action research includes identifying and refining questions, developing a plan, collecting data, interpreting data, and drawing conclusions and implications (Nolan & Hoover, 2004). Others advocate even simpler processes for teacher-led action research (Lopez-Pastor, Monjas, & Manrique, 2011; Milton-Brkich et al, 2010). The process is similar to what is recommended in more academically oriented texts (e.g., O'Leary, 2014). However, literature on teacher-led action research stresses the importance of making the language simple and clear and using routine classroom data, such as student products and teacher materials, in addition to non-routine data, such as surveys, journals, and interviews (Nolan & Hoover, 2004). Nolan and Hoover (2004) note that action research will produce in-house facilitators who will be important assets to districts. They also suggest that teachers should be reminded that the goal is deeper understanding of a question, not necessarily definitive answers (Nolan & Hoover, 2004). Finally, the action research process should be celebrated by sharing projects, which will benefit individual teachers, schools and districts, and the teaching profession.

When action research projects are done within schools, teachers do not feel that they are doing additional work, since the project is integrated with their everyday preparation (Jaipal, 2011). This is not the case when teachers' projects extend beyond the school. Research has also shown that, with collaborative action research, face-to face discussions are essential to stimulating reflection (Bevins, Jordan, & Perry, 2011).

Limitations and Responses

While action research has many positive attributes, it is important to understand its limitations (Foshay, 1994). A critique of action research is that formal knowledge can only be generated by traditional means (West, 2011). In large part because of the small scope of action research, some believe action research findings are impossible to generalize (Cain & Milovic, 2010; Diana, 2011; Foshay, 1994). But an alternative view worth repeating is that:

> AR-developed knowledge can be valuable in contexts other than those where it is developed. . . . Transferring knowledge from one context to another relies on understanding the contextual factors in the situation where the inquiry took place, judging the new context where the knowledge is supposed to be applied, and making a critical assessment of whether the two contexts have sufficient processes in common to make it worthwhile to link them. (Greenwood & Levin, 1998, p. 253)

Action research provides a way to gain a broader understanding of an issue by making generalizations from individual cases (Greenwood & Levin, 1998).

A similar critique suggests that events cannot be understood objectively when the researcher is a participant in them (West, 2011). But social science research emphasizing

post-positivist credibility indicators can produce information that is neutral, authentic, dependable, transferable, and auditable (O'Leary, 2004).

Finally, ethics review has proven to be a problem with action research (Owen, 2006; Shi, 2006). Review boards hinder action research because they are too conservative in their concern about potential harm (Owen, 2006). "Educational action researchers may find themselves in an ethical gray zone battling with issues such as the irrelevance of informed consent for inquiry about one's own practice, emergence of research foci, and openness as well as mutual trust between the researcher and the researched" (Shi, 2006, p. 208). Rather than emphasizing mutual trust, ethics review, designed for quantitative research, stresses confidentiality and anonymity (Shi, 2006).

Teachers have to play a significant role in determining how to go about advancing student moral development in practice. Familiarizing teachers with research-based approaches to advancing moral development and giving them the opportunity to conduct action research allowed them to play an important role in bridging the gap between moral education research and practice.

Human-Centered Design Methods

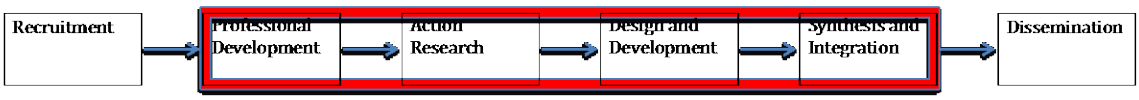


Figure 4.5. Human-centered design methods across phases.

LUMA Human-Centered Design System

Participating teachers were introduced to the same human-centered design methods that are used by design firms. It is the coordination of these methods, more so than the methods themselves, that brings about real world change. The methods used during this intervention are described in *Innovating for People: Handbook of Human-Centered Design Methods* (2012), which was developed by LUMA Institute and includes 36 human-centered design methods, organized into three design skills and nine skill sets that support innovation:

Looking: Methods for Observing Human Experience

Ethnographic Research

- Interviewing
- Fly-on-the-Wall Observations
- Contextual Inquiry
- Walk-a-Mile Immersion

Participatory Research

- What's on Your Radar?
- Buy a Feature
- Build Your Own
- Journaling

Evaluative Research

- Think-Aloud Testing
- Heuristic Review
- Critique
- System Usability Scale

Understanding: Methods for Analyzing Challenges and Opportunities

People and Systems

- Stakeholder Mapping
- Persona Profile
- Experience Diagramming
- Concept Mapping

Patterns and Priorities

- Affinity Clustering
- Bull's-eye Diagramming
- Importance/Difficulty Matrix
- Visualize the Vote

Problem Framing

- Problem Tree Analysis
- Statement Starters
- Abstraction Laddering
- Rose, Thorn, Bud

Making: Methods for Envisioning Future Possibilities

Concept Ideation

- Thumbnail Sketching
- Creative Matrix
- Round Robin
- Alternative Worlds

Modeling and Prototyping

- Storyboarding
- Schematic Diagramming
- Rough and Ready Prototyping
- Appearance Modeling

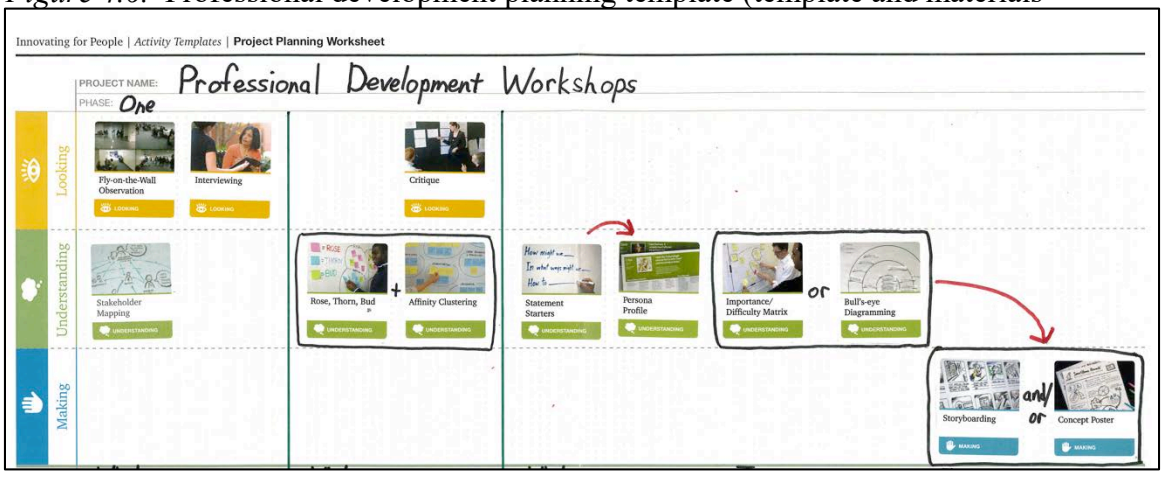
Design Rationale

- Concept Poster
- Video Scenario
- Cover Story Mock-up
- Quick Reference Guide

Professional Development

Human-centered design methods were incorporated during the professional development workshop in order to engage the teachers and introduce them to methods that would subsequently be used to support action research and design and development.

Figure 4.6. Professional development planning template (template and materials



produced by LUMA Institute).

The following human-centered design methods were included in the plan for the professional development workshops.

Fly-on-the-wall observation. Participants were asked to observe what was going on in their classroom and school related to student moral development prior to the professional development workshop. During the workshop, teachers recorded their observations on sticky-notes and created affinity clusters by grouping similar observations together. This helped stimulate discussion.

Interviewing. Participants were also asked to interview some of their peers prior to the workshop. These interviews consisted of informal and casual conversations with their colleagues about issues surrounding moral education. During the workshop, teachers recorded their findings on sticky-notes, and this data, along with the observation data discussed above, was used to create affinity clusters. These interviews also helped participants empathize with their peers.

Stakeholder mapping. Stakeholder mapping helped the teachers gain a sense of the large number of people who have an interest in a student's moral development. The teachers identified the stakeholders who have the largest stake in student moral development. Affinity clustering, discussed below, was used to group stakeholders and establish relationships between them. During subsequent phases of the intervention, this stakeholder map guided teachers as they considered who should be asked to critique the model they developed.

Rose, thorn, bud. After discussing instructional implications with participants, they were asked to identify positive and negative aspects of the implication. They put their observations on color-coded sticky-notes, and similar points were clustered together.

Affinity clustering. Many of the design methods used in this intervention promote divergent thinking. The result is often a chaotic and complex array of data. Affinity clustering is a convergent design method that was used, in conjunction with other methods (e.g., fly-on-the-wall observations and interviewing), to reveal thematic patterns.

Critique. Teachers were asked to critique the instructional implications we discussed. They did this by recording their thoughts on 5x8 notecards, and then sharing their thoughts with the group. This helped to stimulate discussion.

Statement starters. Statement starters were used to encourage divergent thinking. Participants were given a few minutes to complete the sentence, "How might we…" in as many ways as possible that had to do with what they wanted to accomplish during this program. They were encouraged to think big and outside-the-box.

Persona profile. Teachers created persona profiles to help them empathize with their colleagues who were not participating in the study. Creating these fictional characterizations was intended to help teachers consider the beliefs and needs of their peers.

Importance / difficulty matrix. This method was used to help teachers prioritize instructional implications prior to developing their action research plan.

Bulls-eye diagraming. Bulls-eye diagramming serves a purpose similar to an importance / difficulty matrix, and was not used. Based on discussions during the workshop, which were thoughtful and deep, I felt an importance / difficulty matrix was the better option in this case, because it is a bit more precise than a bulls-eye diagram.

Storyboarding. Teachers were given the option of choosing to create a storyboard or concept poster. They elected to create a concept poster, so this method was not used. Storyboards use a series of images to tell a story, and this would have helped to lay the foundation for the development of the teachers' action research plan.

Concept poster. This method was used to establish a clear direction for moving forward by providing a rationale for the action research. A concept poster is a visual presentation format that is intended to show what will work, and why. In a refined state, a concept poster can be used to gain stakeholder support.

Action Research

The action research process is cyclical, and teachers were encouraged to use at least two human-centered design methods during each action research cycle. The methods that were suggested to the teachers are depicted on the following planning template and discussed below.

Figure 4.7. Action research planning template (template and materials produced by LUMA Institute).

The following human-centered design methods were included in the plan for teacher-led action research.

Rough and ready prototyping. This method is normally used to support the development of physical spaces and things. In this context, the teachers developed and tested a series of prototypes, which were the plans developed based on research and their experience inside their classrooms.

Fly-on-the-wall observations. Teacher-led action research is collaborative, and teachers were asked to observe one another at least once during this phase.

Journaling. Teachers were encouraged to journal throughout the action research process so that they could make more thoughtful and informed changes following each action research cycle.

Visualize the vote. Visualize the vote is a convergent design method that participants used to decide among options during the planning stage when opinions within the group differed.

Critique. Participants critiqued their action research plan during the reflection stage.

Design and Development

Following the action research, participants considered their action research findings, what they learned during the professional development workshop, and their own intuition and experiences, and developed a model. Human-centered design methods were used to support the design and development process.

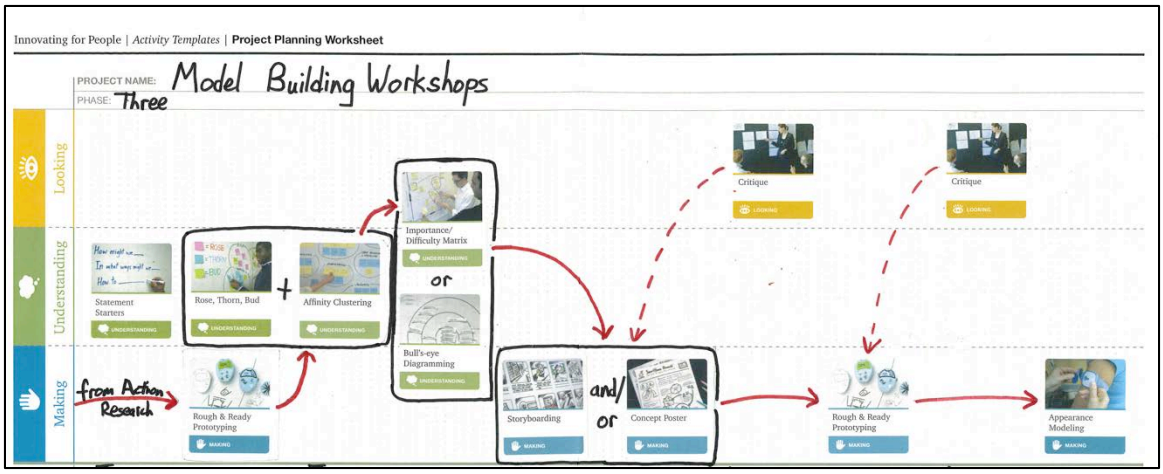


Figure 4.8. Design and development planning template (template and materials produced by LUMA Institute).

The following human-centered design methods were included in the plan for the design and development workshops.

Statement starters. This method was previously used during the professional development workshop. It was used again, here, to encourage divergent thinking.

Rose, thorn, bud. Teachers identified what went well during action research, what did not go well, and areas of potential. These findings were recorded on color-coded sticky notes.

Affinity clustering. This method was used in conjunction with rose, thorn, bud and helped reveal thematic patterns.

Importance / difficulty matrix. This method was used to prioritize instructional implications.

Bulls-eye diagraming. This method could have been used if it had been necessary to further converge or prioritize instructional implications.

Storyboarding. Teachers were asked to develop either a storyboard or concept poster prior to designing their model. Teachers created a storyboard depicting a day in the life of an elementary school student.

Concept poster. Teachers were asked to develop either a storyboard or concept poster prior to designing their model. Teachers chose to create a storyboard.

Rough and ready prototyping. This was the teachers' first attempt at developing a model.

Critique. Teachers asked stakeholders, previously identified during the professional development workshop, to critique their prototype.

Appearance modeling. Teachers made modifications to the model based on feedback, and they produced a refined model.

Synthesis and Integration

This phase of the intervention was intended to synthesize and integrate models developed by multiple teams. Due to the small number of teachers who participated, this phase of the intervention was not necessary.

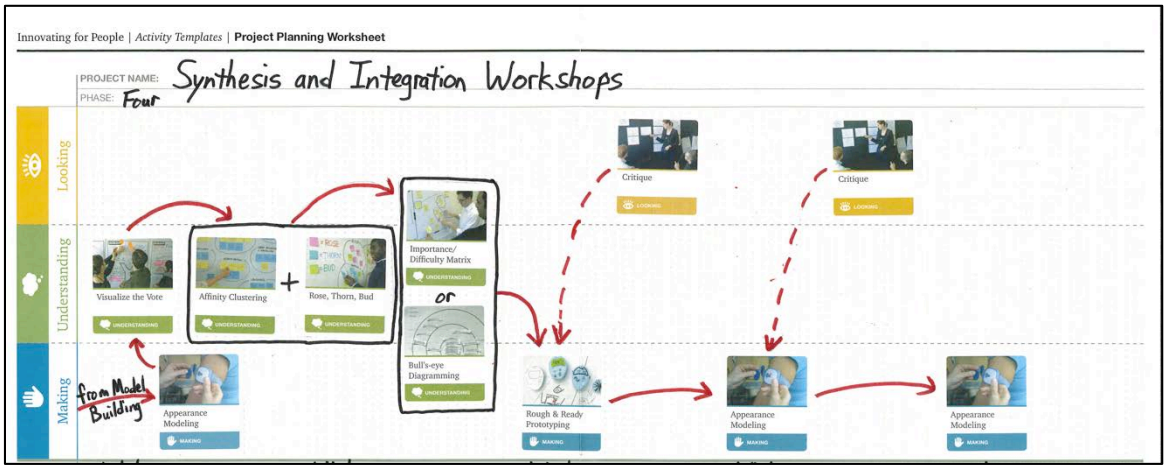


Figure 4.9. Synthesis and integration planning template (template and materials produced by LUMA Institute).

The following human-centered design methods were included in the plan for the synthesis and integration workshops.

Visualize the vote. If multiple teams participated in this intervention, this method would have been used to rank preferences. Each team would have presented their model, and provided support for each component. Afterwards, each participant would have simultaneously voted, once for the best overall model, and three times for specific aspects of models that they liked. They would have done this by tagging the models with color-coded sticky-notes. This would have stimulated a discussion, and this possibly would have been the only convergent design method needed to develop the initial multi-team model.

Affinity clustering / Rose, thorn, bud. Affinity clustering and rose, thorn, bud could have subsequently been used to further converge ideas, if necessary.

Importance / difficulty matrix or Bulls-eye diagraming. Similarly, these methods could have been used to prioritize ideas, if necessary. When facilitating human-centered design workshops for multi-team projects in the district, visualize the vote followed by a discussion has proven to be sufficient to allow participants to converge and prioritize different concepts.

Rough and ready prototyping. This would have been the first draft of the final model.

Critique. Stakeholders identified during the design and development workshops would have been asked to critique both the first draft and the refined draft.

Appearance modeling. Finally, participants would have created a refined model suitable for distribution. Emphasis would have been placed not only on content, usefulness, and usability, but also on aesthetics.

Research Questions

This dissertation addresses a number of important questions, beyond those related to moral education. A core question was: How can teachers actively participate in Design and Development Research?

Chapter 4: Summary and Conclusion

Despite being emphasized in school districts' strategic statements, teachers in Western Pennsylvania receive little to no instruction in their pre-service programs on how to advance student moral development. In this Design and Development Research project, teachers participated in professional development that prepared them to use human-centered design philosophy and methods as they conducted action research in which they attempted to advance their student moral development. Afterwards, they developed a model that conceptualizes how to integrate moral education into curriculum and instruction.

Chapter 5: Intervention Procedure and Evaluation

This research program was shaped by theoretical and practical assumptions that are important to consider before describing the plan in more detail (Cresswell & Clark, 2011). These assumptions informed the development of the intervention procedure, which consists of the activities discussed in the previous chapter. While an outcome evaluation was beyond the scope of this program, a process evaluation focused on fidelity of implementation was conducted.

Theoretical Assumptions

Creswell and Clark (2011) discuss philosophical assumptions, which they call worldviews, that "operate at a broad, abstract level" (p. 39). These worldviews include postpositivism, which holds that there is a single reality that should be impartially viewed by unbiased researchers using deductive methods to verify theory; constructivism, which holds that there are multiple realities that should be viewed by researchers working close to participants to generate theory; participatory, which holds that reality must be collaboratively negotiated by participants as they attempt to bring about change; and pragmatism, which is associated with both singular and multiple realities, practicality, and multiple stances having to do with real world practice. These worldviews, as Guba and Lincoln (1994) point out, have to be accepted on faith alone. There is no way to prove or disprove them, regardless of argument strength (Guba & Lincoln, 1994). The participatory worldview, with its emphasis on changing the social world for the better, is the worldview that guided the development of this intervention (Creswell & Clark, 2011). Because of the participatory worldview's emphasis on change, collaboration, and participation, it is the most appropriate worldview for a study incorporating human-

centered design and teacher-led action research. The elements of this worldview will briefly be considered below.

During this intervention, participants planned and conducted action research, and they worked to collaboratively construct a model. Ontology has to do with the nature of reality and what can be known about it (Creswell & Clark, 2011; Guba & Lincoln, 1994; Lee, 2012; O'Leary, 2014). A political reality, in which findings are negotiated (Cresswell & Clark, 2011), is the ontology that is most closely aligned with this intervention, since participants played an active role in determining the specific direction their action research headed in and the way in which the final model was developed.

Throughout this intervention I worked collaboratively with participants. Epistemology, in the case of this intervention, refers to (a) the relationship between the researcher and participants (Creswell & Clark, 2011; Guba & Lincoln, 1994), and (b) the nature of how knowledge is created (Tsai, Chai, Wong, Hong, & Tan, 2013). Participating teachers were supported as they developed action research plans, collected and analyzed data, and used findings to inform practice.

As this was happening, participants had to negotiate their values with one another. Axiology has to do with the role of values (Cresswell & Clark, 2011). It is a narrow branch of value theory that deals with what things are good, and how good those things are (Schroeder, 2012). During this intervention participants negotiated the *goodness* of various action research plans, potential intervention strategies, and models.

Finally, the process was participatory. Methodology refers to the research process, and it is the focus of this chapter (Creswell & Clark, 2011; Guba & Lincoln, 1994; O'Leary, 2014). This study included participants in the research process via an

iterative process, allowing for cyclical collection and review of results (Cresswell & Clark, 2011). Although action research is often considered to be more expansive than a methodology, some researchers, such as O'Leary (2014), do describe participatory action research as a methodology.

A participatory worldview guided the development of this intervention, and all worldview elements are consistent with this outlook. Below, elements associated with planning and carrying out the intervention are shown in blue and italicized.

Table 5.1

Worldview Elements

Worldview Element	Post-positivism	Constructivism	Participatory	Pragmatism
Ontology	Singular reality	Multiple realities	*Political reality*	Singular and multiple realities
Epistemology	Distance and impartiality	Closeness	*Collaboration*	Practicality
Axiology	Unbiased	Biased	*Negotiated*	Multiple stances
Methodology	Deductive	Inductive	*Participatory*	Combining

(Cresswell & Clark, 2011, p. 42)

Practical Assumptions

In addition to the theoretical assumptions discussed above, a number of practical assumptions were also made. One assumption was that teachers would be interested in participating in this intervention. While district leadership was confident that many teachers would volunteer, there was tension in the district between administration and union leadership, and in the past union leadership had discouraged teachers from participating in activities similar to this. An assumption having to do with teacher self-

efficacy was that the intervention procedure would help teachers reach the characterization stage of Krathwohl's Affective Domain Taxonomy (University of Connecticut, 2014). Finally, an assumption having to do with generalizability was that the model the teachers developed would be useful to other teachers, both inside and outside of the school district. As discussed in Chapter 4, there is debate in the academic community regarding the extent to which this is possible. These are three examples of practical assumptions that were made while developing the intervention procedure.

Intervention Procedure

A logic model turns a concept into an actuality (Kellogg Foundation, 2004). The purpose of the logic model below was to provide stakeholders with a simple image that illustrates how and why this intervention will work (Kellogg Foundation, 2004). The model below outlines the planned intervention procedure, which will be discussed in the next section.

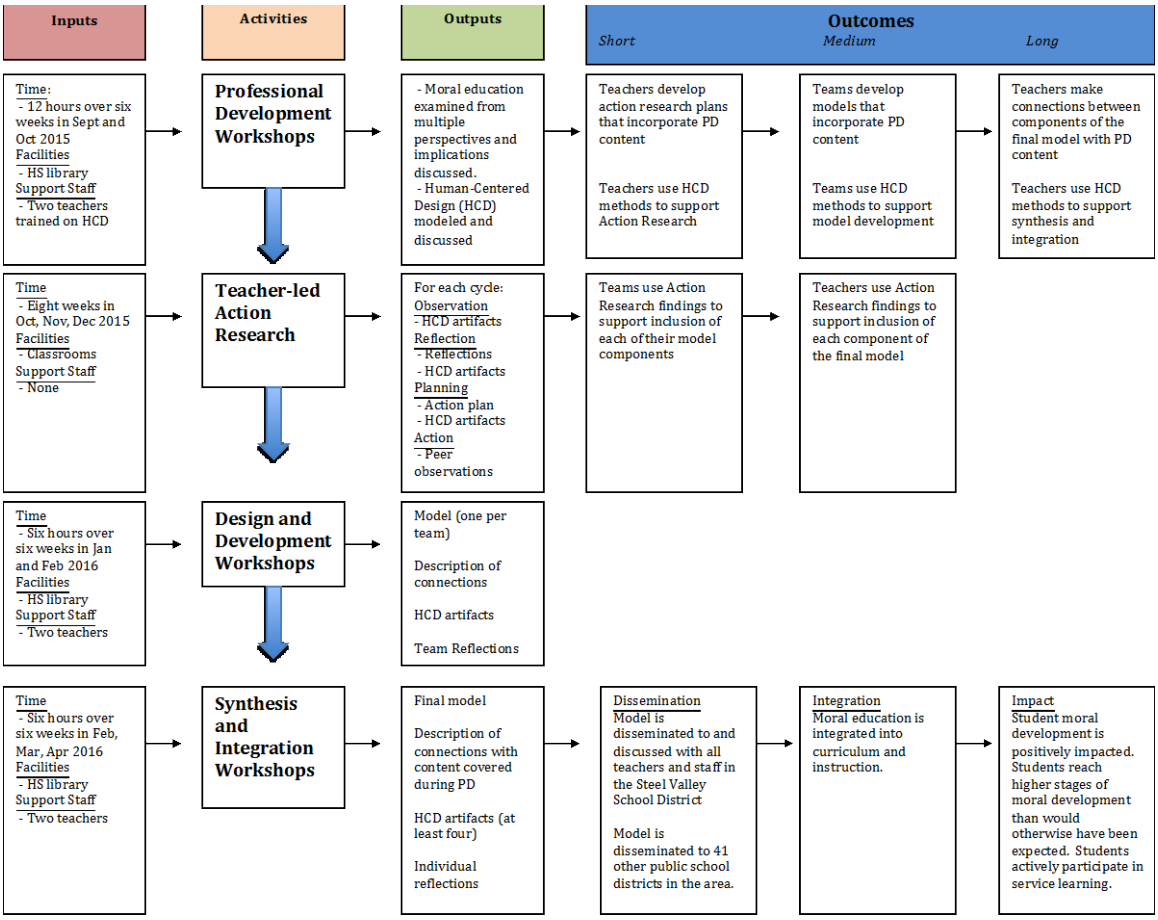


Figure 5.1. Program logic model.

Process Evaluation

The process evaluation question was: To what extent are planned program activities implemented? Measuring the extent to which planned program activities are implemented requires looking inside the intervention's "Black Box" (Nelson, Cordray, Hulleman, Darrow, & Sommer, 2012, p. 381). For this program, this consisted of the activities listed on the logic model. These activities include (1) professional development workshops, (2) teacher-led action research, (3) team-level design and development workshops, and (4) synthesis and integration workshops. The critical elements of each of

these activities entail what Saunders, Evans, and Joshi (2015) call "complete and acceptable delivery of the program" (p. 139).

In order to show that this intervention actually happened, the planned components of this program must have been delivered. Process evaluation questions measuring participation and engagement are irrelevant if the planned activities did not take place. For example, if because of time constraints the implications of moral education research were not discussed during the professional development workshops, the fidelity of the process would be brought into question. Similarly, if participants skipped the reflecting stage of action research, the data collected during that activity would be less meaningful. Such incomplete delivery of program components would make it more difficult to make connections between this intervention and outcomes, and it would bring the usefulness of the final product into question. The original planned program activities are discussed below. Aspects of this plan were modified because of practical constraints, and these modifications will be discussed in Chapter 6.

Professional Development

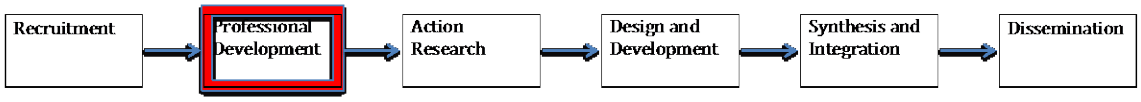


Figure 5.2. Professional development. The intervention process model will be used throughout this chapter to track how the content discussed fits within the larger framework.

Planned program delivery.

- Teams of three teachers from five K-12 public schools attend weekly two-hour professional development workshops after school over the course of six weeks.
- Sessions focus on familiarizing teachers with (a) research and theory related to moral education and (b) human-centered design philosophy and methods.

Fidelity of implementation.

- Measure the amount of content delivered during the professional development workshops using a checklist at the end of each workshop.
- Examine moral education from the philosophical, historical, socio-cultural, economic, and psychological perspectives; discuss the neuroscience behind moral decision-making and discussing both ethics of principles and ethics of care; and examine the implications for educators, specifically in regards to advancing moral reasoning and elevating empathetic dispositions.
- Introduce participants to human-centered design philosophy; discuss and model at least two human-centered design methods during each session.

Action Research

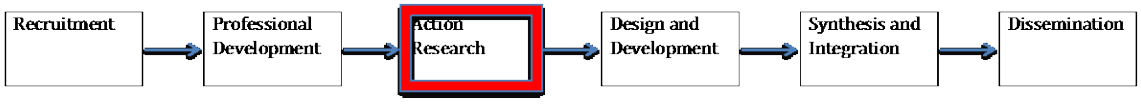


Figure 5.3. Action research.

Planned program delivery.

- Teams conduct cyclical action research in their schools over the course of eight weeks. Teams go through four action research cycles, with each cycle lasting two weeks.
- During each cycle, teams (1) observe, (2) reflect, (3) plan, and (4) act (O'Leary, 2004, p. 170).
- For the observation phase, teams describe the data collected and provide a list of the human-centered design methods used (e.g., interviewing, observations, journaling).
- For the reflection phase, teams submit individual and team reflections and provide a list of the human-centered design methods used (e.g., stakeholder mapping, concept mapping, affinity clustering, importance/difficulty matrix).
- For the planning phase, teams submit the action plans they develop and provide a list of the human-centered design methods used (e.g., storyboarding, concept posters, cover story mock-ups).
- Teams support each component of their action research plans by making a connection to the content covered during the professional development workshops.

Fidelity of implementation.

- Teams transition though the action research phases (i.e., observe, reflect, plan, and act).
- Teams produce the materials identified above.

- Teams make connections between each component of their plan with content covered during professional development.
- Participants conduct at least one peer observation over the course of the action research.
- Teams use at least two human-centered design methods during each cycle.

Design and Development

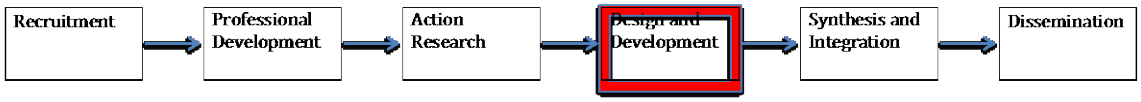


Figure 5.4. Design and development.

Planned program delivery.

- Teams develop models that conceptualize how to integrate moral education into curriculum and instruction during three two-hour model-building workshops over the course of six weeks.
- Teams use at least three human-centered design methods to support this process.
- Teams support each component of their model by making a connection to content covered during the professional development workshops and to data collected during the action research.

Fidelity of implementation.

- Teams identify connections between the components of their model and the content covered during professional development workshops and action research findings.
- Teams use at least three human-centered design methods to support this process (e.g., concept mapping, concept posters).
- Teams identify connections made to research and literature discussed during the professional development workshop and to action research findings.

Synthesis and Integration

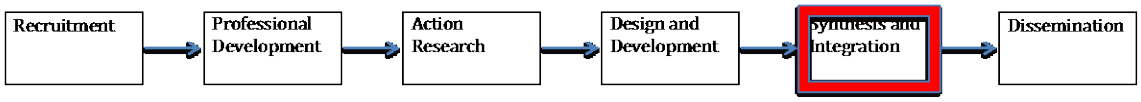


Figure 5.5. Synthesis and integration.

Planned program delivery.

- Participants synthesize and integrate the team-developed models into a single model that conceptualizes how to integrate moral education into curriculum and instruction during three two-hour synthesis and integration workshops over the course of six weeks.
- At least four human-centered design methods are used to support this process (e.g., affinity clustering, importance / difficulty matrix, concept mapping, critique).

- Teams make connections to content covered during the professional development workshops and with data collected during action research to justify each component's inclusion in model.

Fidelity of implementation.

- Examine the connections made between the model components and the content covered during the professional development workshops and the action research findings.
- Use at least four human-centered design methods to support this process.

Showing the extent to which intervention activities are delivered as planned is critical, as the extent to which these activities are implemented will have real world implications when others judge the model's potential usefulness after it is disseminated.

Chapter 5: Summary and Conclusion

This intervention was informed by a participatory worldview, which shaped the way in which activities were planned and carried out. This worldview places emphasis on collaboration, negotiation, and participation; and it is appropriate for an intervention incorporating human-centered design and teacher-led action research. A process evaluation focused on fidelity of implementation was conducted in order to show the extent to which this intervention actually happened. The elements of this evaluation consisted of a detailed description of complete and acceptable delivery, including the extent to which (a) professional development workshops were implemented, (b) teams conducted action research, (c) team design and development workshops were implemented, and (d) synthesis and integration workshops were implemented; and the

specific outputs that were necessary in order to demonstrate high fidelity of implementation.

Chapter 6: Results and Recommendations

Instructional strategies have been shown to advance both moral reasoning and empathetic dispositions. While these strategies have been shown to be effective under controlled conditions, teachers receive little to no training on these strategies, or on how they can be adapted for use in dynamic and complex classroom environments. In this study, teachers learned about research having to do with moral education, moral development, and moral psychology. Considering this research, along with their own experiences, they then developed action research plans and put those plans to the test in their classrooms. Afterwards, the teachers identified how moral education can be brought into schools.

Two core questions examined in this study were a) How can teachers integrate moral education into curriculum and instruction? and b) How can teachers actively participate in Design and Development Research? In order to answer these questions, each phase of the intervention will be discussed, and conclusions and recommendations will be presented. The findings presented here are worth considering for a number of reasons. As highlighted in Chapter 3, there is a striking disconnect between what K-12 public school districts say is important, on the one hand, and the training future teachers receive in the pre-service programs, on the other. Teachers also expressed, during interviews, that they are unprepared to integrate moral education into curriculum and instruction. Additionally, actively involving teachers in Design and Development Research is one way to bridge the research-practice divide that exists in K-12 education.

The original plan for this intervention was scaled back due to both perceived risks and practical constraints. Three teachers, all from a single elementary school,

participated. These teachers attended a professional development workshop in which they were introduced to the content presented in Chapter 2 having to do with moral development, moral psychology, and moral education. Content presented in Chapter 3, having to do with the need for work in this area, and in Chapter 4, having to do with design and development research, action research, and human-centered design, was also discussed. The teachers then conducted action research in which they attempted to advance their students' moral development. Afterwards, they developed a model that illustrated how moral education can be integrated into curriculum and instruction.

Recruitment

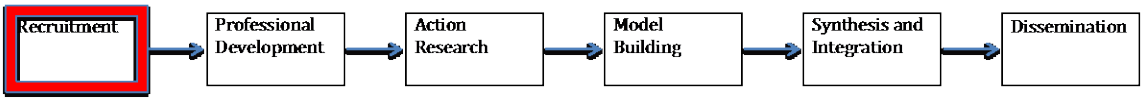


Figure 6.1. Recruitment. The intervention process model will be used throughout this chapter to track how the content discussed fits within the larger framework.

Design professionals who have advised the school district on a number of projects and initiatives have reiterated a mantra that was relevant to recruiting teachers for this intervention: *It is easier to tame a big idea than it is to grow a small one.* The plan for this intervention was scaled back due to perceived risks and challenges and obstacles that arose along the way. The original plan for this intervention was to work with 18 teachers, from six public school districts. This appeared to be logistically possible. The Executive Sponsor for this project was the Curriculum and Instruction Coordinator with the Allegheny Intermediate Unit, which, as previously mentioned, supports 42 public school districts in Allegheny County. The intermediate unit would have assisted with

recruitment, and facilities would have been made available for workshops. Having the opportunity to do work on that scale was appealing, though it took longer than it should have to realize that bigger is only better if it works.

Conducting this intervention on a multi-district scale posed too great of a risk, however, considering the uncontrolled nature of the intervention itself. Both action research and human-centered design, which were integral components of this study, provide participants with significant amounts of power and responsibility (Bradley-Levine et al., 2009; Diana, 2011; Foshay, 1994; Friess, 2010; Steen, 2012; Zoltowski et al., 2012), making this type of intervention even more uncontrolled than most Design and Development Research studies. These factors convinced me to scale back the study and only work with teachers in a single district, although scheduling remained a concern due to the professional obligations of the investigator and participants.

Teachers were recruited via a district-wide email. Fourteen teachers, over 10% of the teaching force in the district, volunteered to participate. Six elementary teachers, seven middle school teachers, and one high school teacher volunteered. No efforts were made to recruit teachers beyond the email. Talking to teachers about this individually or in small groups would have likely significantly increased the number of volunteers, though I wanted to be careful to avoid any perception of pressure by me as an administrator.

A district-level decision further limited the number of participants. Shortly after teachers were recruited, the district's Professional Development Committee offered elementary teachers several professional development options for an upcoming in-service day, which was one of only two scheduled during the school year. Also, the middle

school and high school teachers were now required to participate in whole-group training, eliminating the opportunity for them to participate in the professional development workshop. Having an entire day to devote to the professional development workshop, however, seemed to be worth limiting the study to only elementary teachers, although the decision to further scale back the intervention was not an easy one at the time. This proved to be a wise decision, in view of problems that later arose having to do with coordinating meetings with only three teachers working in a single building. Working with teachers across multiple buildings during the morning professional time, which had never previously been attempted in the district and was the other option being considered, simply would not have been possible, and, in retrospect, was an unrealistic expectation.

I met with the elementary teachers who volunteered to participate in order to explain the details of the program. We discussed the intervention components, and the teachers were told what would be expected of them and the amount of time they would likely spend on this. Afterwards, three of the six teachers decided not to participate. In each case, the reason given was the anticipated time commitment.

Professional Development

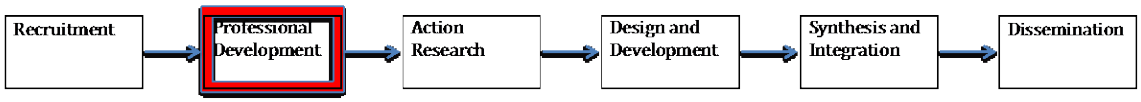


Figure 6.2. Professional Development.

The professional development workshop was implemented with high fidelity. Because of time constraints, all professional development was delivered in a single day that consisted of six working hours. In addition to content related to moral development,

during this workshop teachers learned about human-centered design philosophy and were introduced to a number of human-centered design methods. Additionally, we discussed action research, and teachers began laying the groundwork for their action research plan. Below is a description of what occurred during this phase. A course that would be appropriate for a teacher pre-service program, which expands on the ideas presented during the workshop, is described afterwards.

Professional Development Workshop

Below is a detailed description of what occurred during the professional development workshop. Over 30 artifacts were created during the workshop on large posters using markers and sticky notes, and reflect the impromptu and spontaneously reflective nature of the human-centered design process.

Big picture. After a few minutes of casual conversation, I opened the session with an overview of what we would be focusing on. Teachers were reminded that providing this type of "big picture" overview is something emphasized in the Danielson Framework, which is used for teacher evaluations in Pennsylvania's public schools (Danielson, 2011). In making these kinds of connections throughout the workshop, I hoped to make the experience more worthwhile for the participants with respect to their own professional practice. The concept map, process model, and logic model were introduced and discussed at this point. I also explained why moral education is something that I, personally, am passionate about. The reasons for this have to do with my experiences leading soldiers in Iraq. This personal connection helped set the tone for the session, and appeared to be effective in helping teachers make their own personal connections to the content.

Introductions. The teachers then had the opportunity to introduce themselves. I began by asking if any of them were artists. Two of the teachers shook their heads but pointed to the third, who admitted that she was relatively competent. I said that I went into a first grade class the day before and asked the students if any of them were artists. The teachers laughed and got the point. We talked about why this is the case. While humility plays a part in this, many adults believe they have no artistic ability. Similarly, most teachers do not think that they can make a meaningful contribution to research. We are mistaken in both cases, however. Just as simple drawings can help you think differently and can help convey information, teachers are in the best possible position to make research-practice connections.

As I was creating the artifact depicted in Figure 6.3, the teachers a) drew a picture of themselves and what was important to them, b) wrote a brief explanation of why they volunteered to participate, and c) identified how prepared they felt to advance their students' moral development. The introductions took longer than anticipated, but they were worthwhile because they revealed that the teachers' reasons for participating were very deep and personal. Serious illnesses, deaths, and other tragedies in their lives and the lives of others led these teachers to believe that moral development mattered very much to them. Here are comments from two of the teachers:

- "I have experienced a great deal within my own life, and I have seen my own children struggle through many things. They are very resilient if they have a good moral structure. I work in the community with my church and I see how many people struggle."

- "[S]tudents get lost under all the expectation. They bring all their baggage and there is no one to teach them how to care."

During previous human-centered design workshops that I facilitated or participated in, the introductions were more playful, but these more serious reflections and conversations were appropriate, considering the content.

The teachers also identified how prepared they felt to advance their students' moral development, using a Likert scale. Interestingly, two of the teachers rated their preparedness as a three, on a four-point scale. The other teacher gave herself a one. I was surprised that the two teachers rated themselves so highly, as all of the teachers and administrators interviewed for the needs assessment felt that they were unprepared, including two teachers who received a significant amount of training directly related to moral development. The two teachers who rated themselves highly both felt that their experiences overcoming hardships and tragedies, as mothers and as teachers in a rough, urban environment, prepared them to advance students' moral development. It may be the case that teachers who have higher self-efficacy regarding moral education will be more likely to participate in professional development of this kind.

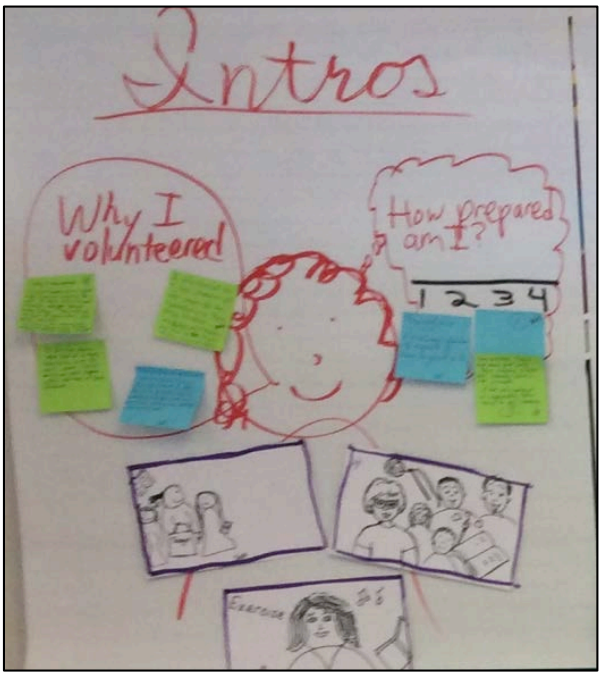


Figure 6.3. Introductions. This is an example of an artifact created during the professional development workshop.

Moral education from multiple perspectives. After the introductions, we considered moral education from the philosophical, historical, economic, and psychological perspectives. For the discussion of moral philosophy, Figure 2.1 was reproduced in order to facilitate discussion. To represent the history of moral education, a graph was created that charted the relative importance of moral education over time, with historical events (i.e., the Revolutionary War, Civil War, Industrial Revolution, World War II, 1960s, and today) serving as markers on the time scale. This helped teachers visualize the time course of moral education within the context of significant periods in American history. The teachers were particularly engaged when discussing the relative importance of moral education at different periods in history before discussing the "right"

answer (see McClellan, 1992). We also briefly talked about expertise, the importance of generating results, and the need to build bridges between theory and practice.

The socio-cultural perspective, which was discussed in Chapter 2, was omitted here, though that content was touched on, briefly, at other points during the workshop, such as during the discussion of Ethics of Principles. The socio-cultural content discussed in Chapter 2 has the potential to be misunderstood. Whether it should be brought up at all and how it should be addressed should be carefully considered.

Observations and interviews. Prior to the workshop, teachers were asked to observe what was taking place in their classes and school with regard to student moral development, and to have conversations with their colleagues about their colleagues' thoughts on this subject. The teachers recorded their thoughts on sticky-notes, placing one comment on each note. They were introduced to the Rose, Bud, Thorn human-centered design method and, for this activity, they were asked to identify only roses and thorns. I then introduced them to Affinity Clustering as we grouped similar points together. This sparked a conversation about the state of moral education in their school, which the teachers all found to be deficient or absent. For example, one teacher observed, "Some adults (teachers) bully kids into compliance and this does not help them. The very behaviors that we are trying to squash are being used in the classroom." This relates to the fact, discussed later in the workshop, that classroom management strategies perceived to be effective may adversely impact student moral development (Springer, 2008). Another related observation was, "Rewards and negative consequences do not always work with students." Other observations noted the importance of modeling

appropriate behaviors, empathizing with students, communicating effectively with students and families, and making personal connections with students.

Need. We next discussed the need for more work in preparing teachers to integrate moral education into curriculum and instruction. During this discussion, I emphasized the importance of focusing on strengths and positive potential, and we briefly talked about appreciative inquiry and positive psychology (Avey et al., 2011; Block, 2008; Cooperrider & Whitney, 2005; Peterson, 2009; Peterson, 2013; Seligman et al., 2005). We then discussed the lack of continuity between teacher pre-service preparation and school district priorities.

Stakeholders. Afterwards, we created a stakeholder map. After discussing who may qualify as a stakeholder, teachers were given a few minutes to write down as many stakeholders as they could think of, putting one stakeholder per sticky-note. Using those notes, they created Affinity Clusters. We talked about how the stakeholder map could be refined by including thought bubbles, arrows with verbs depicting the relationships between stakeholders, and illustrations.

The stakeholders the teachers identified included the students themselves, their peers and classmates, family members, teachers and school administrators, community members, employers, and the children the students may have in the future. One teacher wrote, "Anyone the individual comes in contact with in the future." Guidance counselors, clergy, mentors, and mental health providers were also included. All three of the teachers work in a school in an area with a high crime rate and each identified stakeholders from the criminal justice field, including "police," "law enforcement," and the "judicial system." Whether these stakeholders would have been named if the teachers

worked for a wealthy suburban district cannot be known, but is unlikely. Also, note that "law enforcement" and "judicial system" should be reworded to shift the emphasis to people, thereby making the stakeholder map more human-centered. For example, "police officers" would be preferable to "law enforcement" and "judges" would be preferable to "judicial system."

Neuroscience. We transitioned to a discussion of neuroscience and its role in understanding moral development. After briefly discussing brain structure and function related to moral decision-making, we discussed neuroplasticity. I used the analogy of a path through the woods: Brain connections are like paths through the woods that get easier and easier to walk over the more times you walk them. Initially, it will be tough, the next time it will be a little easier, and over time the path will become a smooth one.

Efficacy and self-efficacy. The discussion of plasticity allowed for a smooth transition to efficacy and self-efficacy. These topics were discussed both in general, and specifically as they pertain to moral education. This, coupled with the discussion related to neuroscience, was intended to convince the teachers both that student moral development can be advanced, and that they have the potential to advance it. The participants were already convinced of this, so we did not dwell on it.

Dual process theory. Digging deeper, we transitioned to a discussion of dual process theory. The teachers were particularly engaged when thinking about and discussing trolley problems, which were described in Chapter 2. When presented with the problems, the teachers were asked to decide who should live, and who should die; and describe the reason for their decision on a separate sticky-note. Their decisions were consistent with decisions typically made by adults who are presented with these

dilemmas. All three of the teachers said that, with an impersonal dilemma, the switch should be flipped (i.e., sacrificing the single person). With a personal dilemma, two of the three teachers said the moral thing to do would be to let the five people die rather than push one person off of a bridge. These problems led to an interesting discussion about how moral decisions are made, how reason and emotion compete, and to what degree a sense of agency is involved.

Special considerations. Teachers were also informed about research having to do with moral development and giftedness, gender, ADHD and mild learning disabilities, and traumatic brain injury. The teachers accepted this information, but did not pursue the topic further.

Stage theory of moral development. As with the trolley problems, the teachers were actively involved when considering the Heinz Dilemma, which is a moral dilemma commonly used with adults during a moral interview to determine their stage of moral development. The dilemma deals with a man named Heinz who is forced to choose between either stealing a drug and saving his wife's life or not stealing the drug and having his wife die. After listening to and thinking about the dilemma, the teachers were asked to decide whether or not Heinz should steal the drug and, on a separate sticky-note, explain their reasoning. All of the teachers said that Heinz should steal the drug. Afterwards, the point was made that, when it comes to moral development, the decision itself matters less than the reasoning behind the decision. We then discussed the stages of moral development, and the teachers attempted to assign the reasoning they used to make their decision to the appropriate stage. They did the same with the reasoning they used

when considering the trolley problems. We talked in more detail about the stages, and I explained how a moral interview would typically be conducted.

Implication: Socratic questioning. We then discussed a strategy that can be used to advance moral reasoning. In the figure below, the teacher is reading a novel to a group of students. Based on the students' questions and comments, she has identified the class's stage of moral development (Stage 2, depicted in the thought bubble), and she is asking appropriate higher-level thinking questions to help those students advance to the next higher stage. Higher-level thinking question stems are displayed in the dialogue bubble, and these question stems were given to the teachers. The clock was used to highlight the importance of providing students with time to reflect, which was discussed in more detail shortly afterwards. The paper with an A+ on it in the bottom right-hand corner was used to make the point that this strategy will not only advance students' moral development, but their cognitive development as well.

Figure 6.4. Implication: Socratic questioning.

In the figure above, teachers used the blue and pink sticky notes to identify roses (pink) and thorns (blue). Many of the thorns were similar, and focused on students:

- "Students may be embarrassed to give feedback on moral issues."
- "Students are not used to responding to these types of questions."
- "Critical thinking is difficult for some students."
- "Students will hesitate because they don't feel comfortable."
- "Students sometimes have difficulty with empathy or understanding characters and their actions."
- "Unwillingness to try."

During the needs assessment, Interviewee 1, who had attended professional development on Socratic questioning and regularly incorporated Socratic discussions into instruction, identified similar difficulties. Two thorns focused on classroom management: "Volume control" and "rules for holding a discussion."

On the other hand, the teachers also identified a number of roses, which were not as narrowly focused as the thorns. Many of the roses dealt with the positive impact this will have on student cognitive development (e.g., listening and speaking, divergent thinking, making more real life connections). The teachers also believed that this would be interesting to students and therefore increase student engagement. Finally, a few roses dealt directly with moral development. The teachers believed that it would be good to "get students talking about moral issues" and that training teachers to identify the moral

development level of their students and to ask appropriate questions would help students move to higher stages of moral development.

Ethics of care. We then returned to dual process theory, and used it to transition from Ethics of Principles to Ethics of Care. First, teachers were given a few minutes to identify different things that can be done to model caring inside of classrooms. It is worth noting that the teachers identified almost all of the recommendations found in literature in just a few minutes. None of the recommendations came as a surprise to the teachers. Teachers already do many of the things discussed in literature, but the group acknowledged that they are often not done with intention. Two of the teachers chose to critique this implication, and one of those teachers made the following points:

- What is modeled often is not reinforced. Efforts to model caring will be overshadowed by the actions of other adults in students' lives.
- Teachers have very different expectations and model caring to very different degrees.
- This takes time, which often is not available.

We then talked about situational morality, and teachers were able to cite numerous examples that illustrated the importance of situational factors in elementary school classrooms.

Next, we discussed appropriate ways to respond when students act immorally. For example, teachers can help students understand the emotional pain they cause when they act in non-caring ways; confirm a child's moral motives, even when the action is wrong; and ask the guilty student to imagine himself or herself as the victim (Narvaez & Lapsley,

2013; Noddings, 2010; Slote, 2010). A teacher brought up perceived impediments to responding in these ways:

- Time constraints.
- Parents telling students the opposite of what they are learning at school (e.g., "If someone bothers you, punch them").
- The ineffectiveness of these strategies when a child has lost control or is very upset.
- The difficulty of confirming a child's moral motives.

During the ensuing discussion, we talked about the fact that classroom management and moral education are not the same, and that strategies that might be effective in managing a classroom might not advance a student's moral development, and vice versa (Springer, 2008). The teachers had to consider all of these things when responding to unethical student conduct in their classrooms.

We then discussed the importance of giving students the opportunity to practice caring. Teachers liked the examples of questions that can be used to spur students into action:

- "How are you going to make the world a better place for everyone?"
- "What positive goals do you have for today?"
- "How did you help someone in school today?"

(Narvaez & Bock, 2014, p. 19).

Based on the subsequent discussion, if I were to facilitate a similar workshop in the future, I would spend more time discussing these questions, and would provide teachers with more examples. We also talked about service learning, and teachers were asked to

come up with examples of service learning projects that could be incorporated into instruction. Some of the projects suggested depended on assistance from adults (e.g., collect clothes for the homeless), while others did not extend over a period of time (e.g., write cards to veterans). In future workshops, I would more strongly emphasize that projects should extend over a period of time and should not be heavily dependent on adult assistance for completion. On a positive note, each of the teachers did include a project in which students would work with younger students in some way, over a longer period of time.

Finally, we discussed the importance of giving students time to reflect, which could include silent reflection and time to reflect in journals. I highlighted that this strategy is one that can and should be integrated with each of the other strategies we discussed, including Socratic questioning.

We concluded the discussion of Ethics of Care by critiquing aspects of it. Each teacher had the opportunity to critique one of the strategies. These critiques were previously discussed and were used to stimulate further discussion prior to prioritizing the instructional implications.

Design and development research. We next examined the content covered in Chapter 4. This included the six types of educational research, and how Design and Development Research fits inside this sequence; the characteristics of high-quality professional development; and action research. We used a series of human-centered design methods to help lay the foundation for the action research plan.

Statement starters. First, the teachers were given a few minutes to come up with as many Statement Starters as possible. Examples included: “How might we . . .

- get students to reflect on their own moral beliefs?"
- get students to reflect on moral issues?"
- develop moral development in children by using fairy tales?"
- use literature to pose questions about moral issues?"
- use current events to address moral development and start conversations?"
- get students to engage in positive, productive discourse on moral issues?"
- encourage students to be more empathetic?"
- change the way we interact to be a more positive role model?"
- model/show students how to reflect on their own behaviors/emotions?"
- develop Socratic questions to engage students in conversations about moral issues?"
- diffuse negative thinking/behaviors in students with regard to peers?"
- develop a sense of understanding and start building bridges in our community?"

Persona profiles. Teachers then created Persona Profiles to help them empathize with their non-participating peers. A point I stressed was that the model they eventually developed was not going to be just for them, but for other teachers in the district, and perhaps other districts, who may or may not be interested in moral education. The profiles were a mix of enthusiastic teachers who believed that "This is wonderful! We can change the world," to disgruntled teachers who felt that "There's not much we can do with these kids. They can't do much."

Importance / difficulty matrix. Finally, we turned to work on the importance / difficulty matrix. The teachers struggled with this, especially initially, as all of the

strategies seemed to be very important to them. The strategies were differentiated more by the difficulty of implementing them, than by their comparative importance. The teachers thought that situational morality and providing appropriate feedback would be the most difficult to apply, not because they are hard to master, but because teachers perceived there to be fewer opportunities to integrate these strategies into instruction as compared to modeling, Socratic questioning, and providing students with opportunities to practice caring. They placed reflection right in the middle. As one teacher explained, "Sometimes there's time to let students reflect, and sometimes there just isn't."

Concept poster. There was not enough time to complete both a Story Board and a Concept Poster, and the teachers chose to work on a Concept Poster. While both a Story Board and Concept Poster promote a vision, a Story Board can more easily be translated into action, and therefore likely would have been more helpful in laying the groundwork for the development of an action research plan. Because of this, in hindsight it would have been better to have them complete a Story Board first, and a Concept Poster only if there was enough time. The teachers were actively engaged in discussing and working on the Concept Poster. The collaborative group effort on this, which rarely happens in these types of workshops without strong encouragement, was impressive.

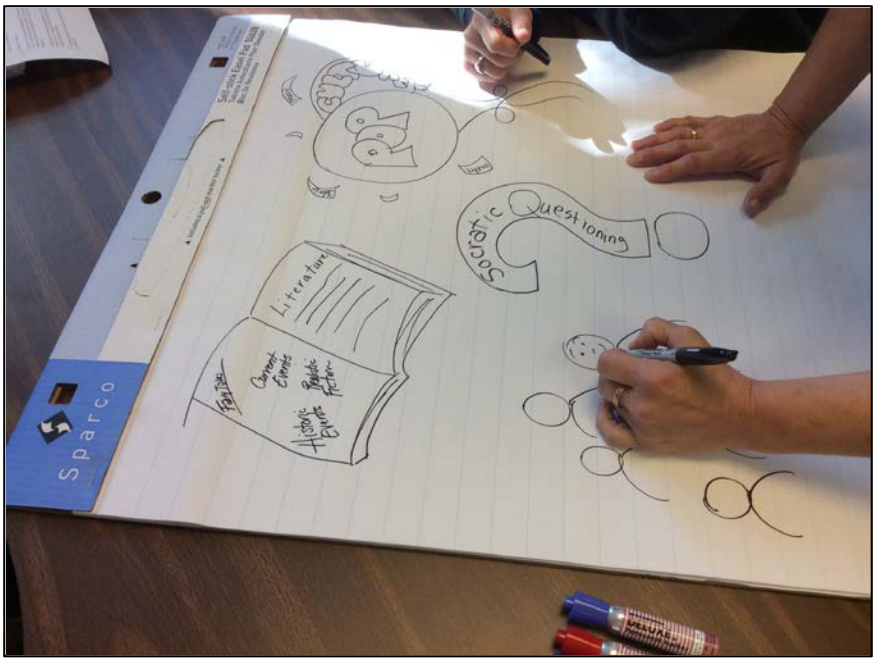


Figure 6.5. Teachers working on concept poster.

The proposed purpose of the Concept Poster was supposed to focus on how to integrate moral education into curriculum and instruction. The teachers headed in a different direction and instead focused on impediments to advancing student moral development. I attempted to gently steer them in the "right" direction, but was unable to. Because they were so engaged, I decided that it would be best to allow them to continue with the process they had begun. The concept poster illustrated an interesting mix of factors that influence a student's moral development, and strategies that can advance moral development. These included strategies we discussed (e.g., literature and Socratic questioning), and influences we did not have time for (e.g., popular culture and technology). Teachers also placed emphasis on socio-cultural factors (e.g., family and environment). As previously discussed, I omitted these when examining moral education from multiple perspectives, although we briefly discussed these issues later in the

workshop. The emphasis the teachers placed on it here suggests that perhaps greater attention should be paid to this in future workshops, although, as previously mentioned, a discussion of this should be approached cautiously.

Feedback. At the end of the workshop, I asked the teachers to reflect on the day. Although I am an administrator, albeit in a different building, the teachers seemed to be comfortable critiquing points that were made throughout the workshop. However, because I was in a position of authority, it is possible that the teachers were overly positive in providing feedback. One teacher wrote, "I was engaged. You . . . didn't force feed me what you believed was important for my students. You shared the techniques, the theories and different models." The other teachers provided similar feedback. This is positive support for a more teacher-centered approach to professional development, one where the "correct method" is not imposed on participants. One teacher did note that "there was a great deal of information presented, and I will have to go back and review it all with a clear head." Finally, one of the teachers appreciated being "reintroduced to teaching techniques." As mentioned earlier, throughout the workshop I made tangential connections whenever possible.

Pre-Service Course Description

Since few districts have the internal capacity to deliver professional development related to moral education, a recommended outcome of the workshop is that moral education be integrated into pre-service curriculum. A syllabus for a semester long course is presented in Appendix C. No textbook appropriate for such a course exists, so articles and book chapters that could be used have been included.

The general objective would be to prepare students to integrate moral education into curriculum and instruction in order to advance their students' moral development. Specific objectives would be for students to be able to a) assess their class's stage of moral development and integrate Socratic questioning into instruction; b) establish a caring classroom environment by modeling caring and responding appropriately to immoral conduct; c) incorporate age-appropriate service learning projects into the curriculum; d) identify how gender, traumatic brain injury, giftedness, and ADHD and mild learning disabilities may impact a student's moral development; and e) explain, in an age-appropriate way, how situational factors can influence moral decision making.

During this professional development workshop, the content presented in Chapter 2 was translated into teacher friendly language and presented using human-centered design methods. This introduced teachers to content that they a) otherwise may not have had access to, since the majority of it was from journals that require subscriptions; and b) otherwise may have found boring and unintelligible, since much of it was intended for an academic audience. Pre-service programs can, and should, prepare future teachers to integrate moral education into curriculum and instruction.

Action Research

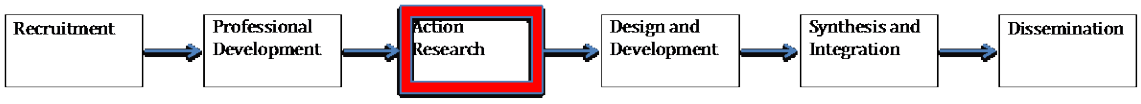


Figure 6.6. Action research.

Unlike the professional development phase of this intervention, the action research phase of this intervention was not implemented with high fidelity. This was due

in large part to the lack of accountability mechanisms that were in place. Two other factors that contributed to this were 1) difficulties that arose in communicating with participants, who could not be reached by phone and frequently did not respond to emails; and 2) the principal of the school where the participating teachers worked, who was very supportive of this intervention, having to unexpectedly go on extended medical leave during this time.

Assessment of Action Research

Although this phase of the intervention was not implemented with high fidelity, the teachers benefited from participating, and the action research findings were useful. One teacher commented, "It was actually extremely easy to incorporate the action research into the curriculum." She went on to provide examples of how she was able to do this, including integrating moral education into writing activities in English Language Arts:

> Many of the moral development concepts that were introduced to the students could be touched upon within the curriculum. . . . Students really put their hearts into their journaling, and they were able to provide real life examples, problems and solutions. Using the moral development theme also made it easier for students to express themselves in writing, as it was not intimidating or daunting as some writings tent do be. Students were able to relate to the topics by calling upon their experiences and writing at their own level of performance. They often expressed very deep thoughts and emotions, which was very enlightening. I was able to learn a great deal about each one of them and to expand upon topics based on their writings.

One of the participants discussed issues that arose during the action research. She wrote, "One of the most difficult things that occurred was that we often were going against the advice of their parents." After discussing progress that she observed, she noted that at times students "went back to their normal response pattern of acting out, yelling, or fighting. Unfortunately, just recently, one of my homeroom students [in second grade] brought a knife to school because another student kept teasing him. He admitted that he intended to stab the other student for the continued harassment." The teacher also wrote, "Another issue that I, personally, had was that I could not mention anything affiliated with God, or the Bible. As a devout and very spiritual Christian, these are key elements in my own moral compass, as well as my children's."

This phase of the intervention served as an extension of the professional development workshop and enabled the teachers to take what they learned about moral education and put it into practice. This shows how coupling a professional development workshop with subsequent action research can help compel teachers to use what they learned during the workshop inside their classrooms, which often does not happen. Some of the issues that arose during this phase of the intervention can easily be corrected if accountability mechanisms are put in place. In this study, since the teachers were doing this voluntarily, the threat of their quitting if they perceived this to be too burdensome was very real.

Observations and Discussion

K-12 educators conducting action research, or supporting teachers who are, may find the following observations helpful.

Collaboration. As discussed in Chapter 4, the collaborative nature of action research is emphasized in literature (Bradley-Levine et al., 2009; Feldman & Weiss, 2010; Jaipal & Figg, 2011; Milton-Brkich et al., 2010; O'Leary, 2012), but not within the Danielson Framework or by the Pennsylvania Department of Education (Danielson 2011; Pennsylvania Department of Education, 2013). While collaboration is easy to justify theoretically using constructivism and cognitive learning theories, there is no research that shows that collaboration will lead to better outcomes with action research. Practical constraints that make collaboration difficult in a school setting should be taken into account by those supporting action research projects. In this study, the teachers benefited from talking things through when we met, although I would not characterize their efforts as being "collaborative," at least as the word is used in literature having to do with action research. The teachers in this study worked hard and enthusiastically headed in different directions. They may have been less enthusiastic about working on a plan that was not their own.

Human-centered design. The participating teachers did not receive sufficient training on either human-centered design philosophy or on the accompanying methods, and, therefore, were not able to use those methods effectively during this phase of the intervention. Even if accountability mechanisms were in place and the teachers could have been compelled to use a given number of methods during each action research cycle, it is doubtful that doing so would have been helpful, given the limited extent of the training provided. Incorporating human-centered design methods was especially difficult during this phase of the intervention because of the limited time available to meet with teachers. In hindsight, two days of professional development on human-centered design

philosophy and methods would have been necessary in order for the teachers to effectively use the methods while conducting action research with the level of support that was provided during this intervention.

Level of support. During this intervention, a balance had to be struck between supporting the teachers while at the same time allowing them to pave their own paths. I have my own ideas about how moral education should be brought into classrooms and schools, and I had to resist the tendency that commonly arises during design projects for the designer to steer participants in a certain direction (Gulliksen et al., 2003; Steen, 2012). This was made more difficult because the teachers explicitly sought specific guidance as to the direction they should head. At three out of the four meetings during this phase, the teachers asked for more specific direction in regards to strategies they should focus on and what I expected the final model to look like. Each time, the ensuing conversation made it clear that they did not want to be responsible for "messing up" my project/dissertation. I explained that one of the broader goals of this intervention was that teachers play a major role in building a bridge between research and practice. The fact that this came up again and again shows that the teachers had trouble accepting this. It may have been beneficial to spend additional time during the professional development workshop discussing the research-practice divide in education, and why classroom teachers are ideally positioned to bridge that divide.

Discussions with teachers. Two points were reiterated throughout this phase of the intervention in conversations with the teachers. While it was important to give the teachers the opportunity to pave their own paths, as the facilitator I felt it necessary to weigh-in on these occasions.

Complex versus effective. An idea we returned to a number of times was that moral education does not have to be overly elaborate or complex. Teachers already do many of the things we talked about and, in some ways, it is just a matter of doing these things intentionally, or recognizing opportunities that exist to incorporate the strategies. For example, the teachers struggled to think of ways to provide students with opportunities to practice caring. They came up with big, adult-dependent ideas, such as writing letters to veterans, which likely would have little impact on students' moral development. At one point, they said that it was hard to come up with ways for students to practice caring on a regular basis. But these teachers all *already* provide students with many opportunities to do this. For example, students in their classes have jobs, such as passing out and collecting papers, organizing bookshelves, and turning in the lunch count; if a student is sick another student will be asked to get her work; and students are routinely asked to share. The teachers were encouraged to think of ways to make the things they are already doing more meaningful (e.g., providing students with time to reflect, connecting these things to academic content, asking higher-level thinking questions about these activities, etc.). Despite returning to this idea a number of times, throughout this phase the teachers seemed more drawn towards thinking that "big" activities mattered more.

Small victories. Another point that was made multiple times during this phase was that the impact of today's small victories cannot be predicted over the long term. During one of our meetings, one of the teachers pointed out, disappointedly, that her students were only well behaved when she was around. This was only a few weeks after she attended the professional development workshop and began implementing the

strategies that were discussed. Ideally, she felt that the efforts should lead the students to be "good" even when no one is looking. I encouraged the teachers to focus on the positive things they were seeing in their classrooms. In this case, the teacher's students were now being good when she was watching, whereas six-weeks ago they were not. While that was a huge step forward, those victories were easily overlooked.

Interestingly, teachers noted what they perceived to be significant improvements with their students' moral reasoning during this phase. Based on comments made during discussions and in writing assignments, the teachers felt that their students made noticeable progress in just a few weeks. While teachers perceived that students seemed to be more empathetic, as well, they said this was very inconsistent, as students who appeared to have made progress often regressed.

Design and Development

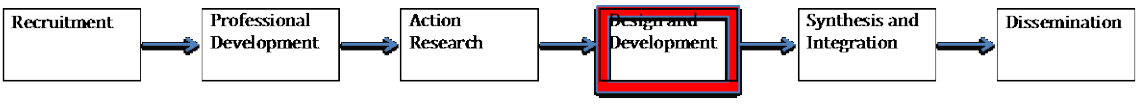


Figure 6.7. Design and development.

Following the action research phase, we transitioned into the model-building phase of the intervention. Although having an entire day devoted to this would have been preferable, this was not an option. Instead, we met four times after school, for around an hour-and-a-half each time. Because of family obligations, one of the three teachers who participated in the professional development and action research was unable to attend. During our first meeting, we laid the groundwork for developing a model. Teachers began by reflecting on the action research phase, and we then revisited some of the

human-centered design methods that were introduced during the professional development workshop. The teachers were given three minutes to come up with as many ways as possible to complete the sentence "How might we…" The purpose of this method was to encourage divergent thinking. Responses included, "How might we:

- continue to contribute to our present students' moral development as they move on in school?"
- fit more of the moral development into the curriculum with limited time?"
- assist children who live with ongoing violence at home or in the community?"
- encourage other faculty to teach moral development?"
- get parents/guardians involved in appropriate moral development activities?"
- encourage children to stop and think before they act?"
- teach appropriate moral development when parents are telling their children to do something else?"
- get parents to buy into the model?"
- use it to build a better school community?"
- implement it to help others?"
- use it to make changes in the school that are important to the kids?"
- reflect on what we learned?"
- encourage students to be independent thinkers?"

The teachers were then asked to use the Rose, Thorn, Bud method to identify what went well during the action research phase, what did not go well, and areas with potential. During the professional development workshop, we did not include the bud when this method was used, since it is difficult for beginners to differentiate buds from

roses and thorns. We attempted to incorporate it here, although only one bud was identified. Although only two teachers were present, they were able to create a number of clusters. The clusters with predominantly roses dealt with academics (i.e., literature, free writing, and direct instruction). Thorns focused on student collaboration and group work. Both of the teachers identified similar thorns in regards to this:

- "Having students work with a partner on moral development discussions / activities."
- "Small group or partner work."

During the ensuing discussion, the teachers explained that students got a lot more out of journaling and private discussions. Teachers said that, when interacting with their peers, students seemed to want to "save face" and "held back." Group discussions were "not meaningful" and students were "not genuine." Recall that Interviewee 1, who taught 8th grade language arts, also identified this as an issue:

> Obviously some of them find this to be an uncomfortable area to go, because they don't feel safe or they don't feel like they can offer their opinion or that they can really open up and be honest. I think a lot of kids put on a front… and to do this [actively participate in Socratic discussions about moral dilemmas found in literature], they have to tear down that front, or at least peak from behind it, and be *real*. And I think some kids find that really hard to do.

The fact that this is also hard for kids in second grade classrooms is interesting, and unfortunate.

Finally, we plotted the instructional strategies on an importance difficulty matrix. The teachers had less trouble with this method than they did during the professional

development workshop, although, again, they struggled to differentiate the strategies based on their importance, as they felt that all of the strategies we discussed were important. Instead, as they did during the professional development workshop, the teachers differentiated the strategies based on their difficulty. And, as they did during the professional development workshop, the teachers considered the difficulty of being able to implement the strategies in a classroom environment (e.g., finding the time, having the opportunity) rather than the inherent difficulty of the strategy itself (e.g., the knowledge and skills necessary to successfully implement the strategy). The teachers believed that Socratic questioning, direct instruction, practicing care, and modeling were all about equally important, and felt that reflection was slightly less so. They felt that Socratic questioning was the easiest strategy to implement, followed by direct instruction, practicing care, and modeling. Teachers had the opportunity to identify other strategies they thought of, and one of them discussed being able to spontaneously respond to things that come up in the classroom. This was judged to be less important than the other strategies. The teachers' discussion about the difficulty of modeling what caring looks like was interesting. As they did during the action research phase, the teachers seemed to overlook the many things they *already* do throughout the day to model caring (e.g., showing sympathy, being respectful, greeting students, etc.). Instead, the teachers viewed modeling as a kind of mini-lesson.

At our second meeting during this phase, teachers completed a Story Board in which they attempted to tell the story of how moral education can be brought into classrooms. They decided to tell a student's story, rather than a teacher's; and to tell the story over the course of a day, rather than a longer or shorter time period. In their story, a

student's day gets off to a bad start before he even leaves for school, and he goes to school in a bad mood. His teacher talks to him and works to develop a positive relationship with him, so that by the end of the day the student is in a much better mood. As they did when developing the Concept Poster during the professional development workshop, teachers again focused more on causes of immoral behavior than on instructional strategies. They also focused on how a caring environment can impact a student. Because the Story Board did not address instructional strategies that teachers can use, I suggested that they create another Story Board, this time from a teacher's perspective. They struggled to get started, so I suggested that they imagine they were providing professional development to their peers on moral education. How would that teacher's classroom be different from other teachers? What are some of the things she would be doing? The teachers went on to generate a long list. We talked about how other teachers might find such a list overwhelming, and they proceeded to group like points together and prioritize items. They were not able to create a Story Board, since most of the items on their list were general (e.g., be available; teamwork; ask for help; be humble). Most of their points did not appear to be related to what was discussed during the professional development workshop, or with action research findings. Adhering to a tenet of human-centered design philosophy, I chose not to interfere. We then transitioned into developing a model. In order to give the teachers as much flexibility as possible, I provided a number of examples of different figures, and also explained that lists or tables would be appropriate for this.

At our next meeting, we briefly reviewed the work that was previously done, and then worked to develop a model. I reminded the teachers that each component of the

model needed to be supported with 1) research and literature, 2) action research findings, and 3) personal experiences and intuition. We spent time discussing the strategies the teachers employed during action research that they found to be most beneficial, and made connections between these strategies and research. Teachers quickly rejected any type of linear model, because they felt it would be a mistake to prioritize some strategies over others. One teacher said, "In this building, modeling care is the most important." She went on to explain that, in other buildings, other strategies might be more essential than modeling. The teachers viewed all of the strategies as being tightly intertwined, and they supported this by pointing to their experiences during action research, where strategies were coupled together and built off of one another. They started with the idea of multiple Venn Diagrams, all intersecting, and then decided to make a flower, eventually adding leaves that included the support for each component. As they did when developing Importance/Difficulty Matrices, the teachers did not differentiate the strategies in terms of importance. Instead, they believed all of the strategies were important and warranted inclusion in the final model.

This shows the importance of carefully considering the content that is initially introduced, as it may strongly influence the direction teachers head in with design and development. Not all of the professional development content made a strong impression on the teachers though. Kohlberg's stage theory of moral development was deemed to be relatively unimportant, and not worth the time it would take for a teacher to thoroughly understand it. Instead of knowing the different stages of moral development, teachers felt that by knowing their students, and scaffolding questions, they could reach the same end.

The components of the teachers' model are listed below. The teachers supported the inclusion of each component by pointing to a) research and literature discussed during the professional development workshop; b) previous positive experiences; and c) positive experiences they had while conducting action research.

Teachers' Model

The teachers' model consisted of five components, which they deemed to be of equal importance. Teachers placed the components of the model in the petals of a flower, with the support for the components in the leaves. They also described, in detail, an analogy of how students are like flowers in that they need to be cared for in order to grow. The model they developed is depicted below.

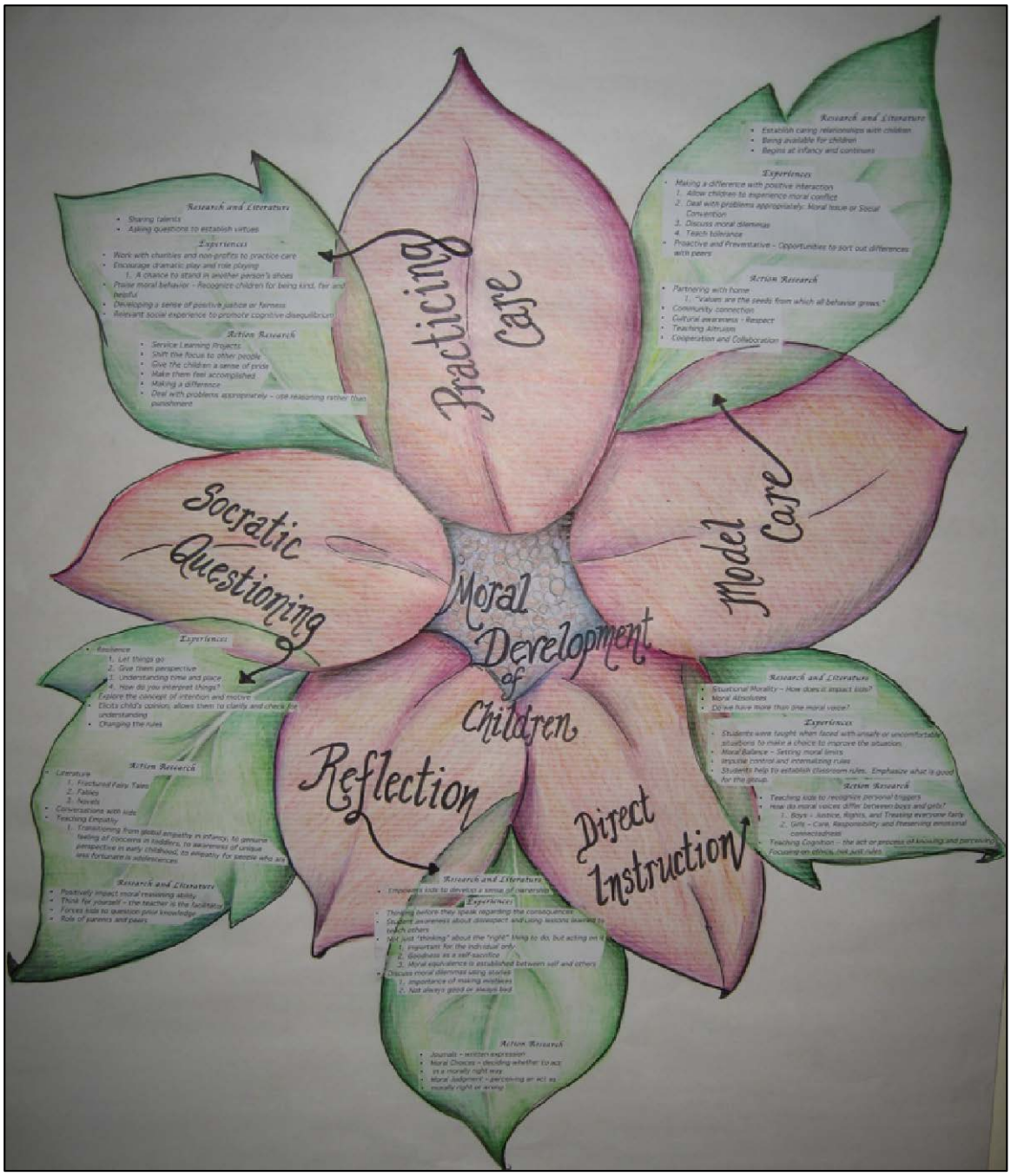


Figure 6.8. Teacher's model.

Model Care

Research and Literature

- Establish caring relationships with children (Narvaez & Bock, 2014; Noddings, 2010)
- Be available for children (Collier, 2005; Narvaez, 2010)
- Begins at infancy and continues (Narvaez & Bock, 2014)

Experiences

- Make a difference with positive interactions
    - Allow children to experience moral conflict
    - Deal with problems appropriately: Differentiate moral issues from social conventions
    - Discuss moral dilemmas
    - Teach tolerance
- Proactive and Preventative – Provide students with opportunities to sort out differences with peers

Action Research

- Partner with home
    - Values are the seeds from which all behavior grows.
    - Values from home are brought into school.
- Connect with the community
- Be aware of, and respect, cultural differences
- Model altruism
- Provide students with opportunities to connect and collaborate

Direct Instruction

Research and Literature

- Teach students about the importance of situational factors in moral decision making (van IJzendoorn et al., 2010)
- Speak in terms of moral absolutes, when appropriate (Kish-Gephart et al., 2010)
- Teach students that they have more than one moral voice. One of the teachers found research on this, although she was unable to find the source.

Experiences

- Teach students to choose to improve unsafe or uncomfortable situations
- Set moral limits by clearly distinguishing what is right from wrong
- Teach students to control impulses and internalize rules
- Have students help to establish classroom rules. Emphasize what is good for the group.

Action Research

- Teach students to recognize personal triggers
- Gender differences. Note that these action research findings are not consistent with research and literature on the subject, which was discussed during the professional development workshop.
    1. Boys – Justice, rights, and treating everyone fairly
    2. Girls – Care, responsibility, and preserving emotional connectedness
- Teach students to stop and think when confronted with ethical dilemmas
- Focus on right and wrong, not just rules

Reflection

Research and Literature

- Give students time to consider alternatives and come to their own decisions (Paxton et al., 2011)

Experiences

- Teach students to think before they speak, and consider the consequences
- Give students opportunities to reflect on classmates' disrespectful behavior
- Teach students to follow through with action, following reflection
- As students grow and develop, providing them opportunities to reflect becomes more important
- Have students reflect on moral dilemmas found in literature
    - Importance of reflecting on mistakes
    - Gray areas – actions are not always all good or all bad

Action Research

- Provide students opportunities to reflect in journals
- Provide students with time to reflect and decide whether to act in a morally right way
- Provide students with time to reflect on whether an action was morally right or wrong

Socratic Questioning

Research and Literature

- Positively impacts moral reasoning ability (Blatt & Kohlberg, 1975/1994; Kohlberg, 1975; Krebs & Rosenwald, 1977)
- The teacher acts as a facilitator and encourages students to think for themselves (Chorzempa & Lapidus, 2009; Kohlberg & Peters, 1975)
- Forces students to question prior knowledge (Paul & Elder, 2007)

Experiences

- Use Socratic Questioning to encourage resilience
- Discuss intentions and motives
- Give students the opportunity to clarify their opinion and check their own understanding
- Have discussions about rules

Action Research

- Use literature as a springboard
    - Fractured Fairy Tales
    - Fables
    - Novels
- Incorporate while having conversations with students
- Use Socratic questioning to foster empathy
- Understand developmental levels and ask questions accordingly

Practicing Care

Research and Literature

- Provide students opportunities to share their talents (Billig, 2002; Billig, 2000; Scott, 2012)

- Ask questions to establish virtues (Narvaez & Bock, 2014)

Experiences

- Work with charities and non-profits to practice care
- Encourage dramatic play and role playing
    - Give students opportunities to stand in another person's shoes
- Praise moral behavior: Recognize children for being kind, fair and helpful
- Help students develop a sense of justice or fairness by giving them opportunities to help their peers

Action Research

- Incorporate service learning projects
- Shift the focus to other people, and encourage action
- Provide students opportunities do helpful things they can be proud of
- Provide students with opportunities to make a difference
- Deal with problems appropriately – reason with students, rather than just punishing them

Teacher Reflections

Following the development of the model, teachers were asked to reflect on their experiences. Because I am an administrator in the same district, it is possible that their reflections were overly positive.

Professional Development

When discussing the professional development workshop, one teacher said:

The moral development workshop was one of the most meaningful and positive professional development activities that I have ever done. Although it was a bit

> difficult to comprehend the "big picture" in the beginning of the project, it quickly became clear. I really liked the fact that we were actually a part of the development of the program.

Another teacher said it was "probably the best workshop that I have attended in all of my years of teaching." She provided a number of reasons why, including:

- "It was hands on and creative. I like that we were challenged to think outside of the box. I appreciated that our input was important."
- "I valued the fact that discussion was viewed as important."
- "I am glad that there wasn't an emphasis or focus on technology."
- "We were allowed to take our time, listen, appreciate and reflect on what we were working on."

Action Research

A teacher admitted that the action research was "a bit more challenging." During the action research phase, she came to realize that personal strengths were providing opportunities for reflection and Socratic questioning. She also discovered that she models caring and provides students with opportunities to practice caring more than she realized. In discussing direct instruction, she said:

> Every time I hear the word "Direct Instruction" I cringe. I don't know why, but I initially think of "Dick and Jane" stories and repetitive words. I think boring and dull. . . . When I look at what I learned about Direct Instruction through this process, it makes me smile. Situational morality, moral absolutes . . . Wow!

Her colleague said:

I was able to be very creative in my approach to teaching moral development, and it challenged me to also think on my feet at times. The activities facilitated an even closer and more positive relationship between my students and me. I was astonished at times by the openness and the willingness of my students in sharing their personal experiences and thoughts. Their input opened my mind and heart to many things I might not have discovered, had it not been for this project.

While planning activities for the Moral Development lessons, I found it easy to embed the lessons and moral issues into the existing curriculum for other subjects, especially Language Arts. There were many lessons to be explored through readings, journaling, writing prompts, hands-on activities, character analysis, etc. All students were able to participate fully, regardless of their individual stages of moral development and academic performance.

During the project, I discovered that many of the kids were conflicted with regard to choices. Parents and guardians were teaching them one way to deal with issues, while teachers are instructing them to use other strategies. There seemed to be a great deal of anxiety when students were in situations that required them to make choices in which the home message was the "fight back," "snitches get stiches," etc., while the school message was to "walk away," "tell an adult," "hands off," etc. This was very discouraging for me. I began to think about ways to educate parents/guardians in order to break this cycle. Can it ever be done? I often questioned my ability to be effective in this area if I was only with them for

such a short time. Unfortunately, many times, the teachings of the home environment / neighborhood prevailed.

During the project, I also had many chances to reveal a lot of things about my experiences, my family, etc., which seemed to establish a better sense of trust and understanding between the students and me. We became more of a "family" as time passed, and I witnessed the evolution of a caring culture within the classroom. There were some definite bumps along the way, but I was very pleased with the overall outcome of the program.

Design and Development

The teachers spent much more time reflecting on the first two phases of the intervention than they did on the design and development phase. One teacher said, "This was the fun part." She talked about her experience working along side the other participating teacher: "We see ourselves as more than their teacher, but as their caretakers. . . . We know we must look out for them." The teacher went on to describe, in detail, the analogy between students and flowers.

Suggested Change

One of the teachers said she would have liked to conduct more research on her own. During the professional development workshop I mentioned that I could provide the teachers with more information on any of the topics we discussed, but I did not emphasize this, both because I did not believe the teachers would be interested in pursuing the topics further, and because I worried about overwhelming them. The

teacher said, “I think I learn best when I have time to read and research on my own, make personal connections with what I am reading, and reflect.”

Effect on Teachers

One of the teachers said she felt more prepared to integrate moral education into curriculum and instruction:

> As a teacher, I have always considered my students to be “my kids,” and I treat them accordingly. I have always tried to teach and model positive morality, virtues, and making positive choices, although it is sometimes difficult to address these issues in the classroom. Sometimes, the values and teaching of parents and guardians are not synonymous with those that we are teaching at school, or my own. Our teachings may not be accepted by some, and it can become difficult to avoid crossing the line between home and school. The Moral Development Project provided a much needed opportunity to actively engage in these teachings with focus through a research and action-based plan, which is rooted in the realities of the classroom. I now feel more equipped to address the moral issues and moral development of my students with added confidence, and I will continue to do so throughout my continued years of teaching, reflecting on my experiences during this project.

Another teacher said, “This project positively impacted me and I will take what I have learned from this project and use my new knowledge to positively impact my students’ moral development. . . . I have already used many things in my classroom that I learned from this experience.”

Moving Forward

A teacher said:

> When we first began working on the project, I was not sure of the types of strategies that would work with my students. Now, I am much more comfortable with teaching moral development, as I have a solid plan for doing so. As we progressed in our research and teachings, it became much easier to approach the subject, using much of the curriculum that was already in place for the academic subjects. I was able to incorporate the teaching into the literature, writing, journaling, Socratic questioning, etc. There were also many "teaching moments" that evolved throughout the project, allowing me to address the specific issues of my students. Moving forward, I will definitely incorporate the strategies that I have learned during this project into my curriculum and instruction, while working to improve upon the strategies and approaches.

Another replied:

> I will continue to integrate the strategies that I learned into my curriculum and instruction. . . . I would hope that as a district we begin to realize how important the moral development of our children is and change the district's focus to incorporate it more.

Researcher's Perspective

This experience helped me better understand the complexity of integrating moral education into K-12 curriculum and instruction, and the importance of taking teachers' perspectives into account when developing products that are intended for them. My thoughts on bringing moral education into classrooms were shaped by my experiences during this intervention, and differ slightly from the teachers'. I have come to believe

that modeling care, especially by establishing caring relationships with individual students, is an essential first step when it comes to moral education. I have also concluded that incorporating service-learning projects across grade levels is both simple and meaningful. Finally, I think teachers should be trained so that they have a basic understanding of moral development and are able to integrate Socratic questioning into instruction.

Research Questions

The content presented in this chapter was intended to address two core research questions.

How can teachers integrate moral education into curriculum and instruction?

Before teachers can integrate moral education into curriculum and instruction, content must be made accessible to them. This study represents a step in that direction, as research and literature having to do with moral education, moral development, and moral psychology were translated into teacher-friendly language and presented to practitioners, who then used that information to inform instruction. A syllabus for a teacher pre-service course that would pre-prepare teachers to integrate moral education into curriculum and instruction was also developed.

Additionally, teachers developed a model of how they believe moral education should be integrated into curriculum and instruction. The model consisted of five components: a) Model care, b) practice caring, c) Socratic questioning, d) direct instruction, and e) reflection. Teachers believed their peers should receive training on these instructional strategies and work to integrate them into their classrooms.

How can teachers actively participate in Design and Development Research?

This study showed that a professional development workshop followed by teacher-led action research provides a solid foundation for design and development. The process model developed and used for this study can be used to involve teachers in design and development research and support school and district-level design and development of policies, procedures, and products.

Future Research

Below are suggestions for future research.

- Conduct quantitative or mixed-methods research that incorporate outcome evaluations having to do with a) teacher efficacy / self-efficacy; b) student moral reasoning; c) student empathetic dispositions; d) extent of integration into curriculum and instruction.
- Conduct qualitative research to determine if the process model developed for this intervention can effectively support other educational design and development efforts (e.g., development of policy, procedures, and products at the school or district level).
- Conduct case study research to determine if a professional development workshop followed by action research is an effective way to compel teachers to use what they learn in practice.
- Conduct a comprehensive review of teacher education practices as they relate to student moral development.
- Explore, in greater depth and on a larger scale, the disconnect between teacher pre-service program preparation and school district expectations having to do with student moral development.

- Conduct case study research of scale up efforts.

Limitations and Responses

Limitations having to do with a) connections between research related to moral education and the instructional implications, b) the generalizability of action research findings, and c) fidelity of implementation have previously been discussed. A more general limitation is that the participatory nature of this intervention led to a high degree of unpredictability. Often, I found myself wanting to steer teachers in the "right" direction, although I refrained because I wanted to avoid a top-down dynamic. Similarly, I felt that, in order to minimize the perception that I was in a position of power, it was important to avoid giving the teachers any type of test, and the lack of pre- and post-test data is another limitation. The final model the teachers developed is not what I envisioned, or what I would have produced myself. However, by ceding control and accepting that things might not go the way I anticipated, this study will prove to be more useful than if I had steered teachers in the direction I wanted them to head in.

Three teachers from a single school participated in this study, which was not implemented with high fidelity. While this may cause some to be dismissive, the results may prove to be useful to others. Educational leaders, for example, can consider if the context of this study is sufficiently similar to the contexts in which they operate to use the process model developed for this study, or an adapted version of it, to a) extend professional development into classrooms, b) support teacher-led action research, or c) give teachers an opportunity to contribute to the design and development of district and school-level policies, procedures, and products. Teachers can consider the research and literature presented in Chapters 2 and 6 to determine if any of it might help them integrate

moral education into their own curriculum and instruction. Finally, scholars doing work in the area of moral education may find the teachers' perspectives useful as they move forward with their own work; and pre-service instructors might be interested in the disconnect between teacher preparation and district expectations, and in the sample course syllabus that expands upon the professional development workshop.

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Appendix A: Moral Development Emphasis in District Strategic Statements

Moral Development as a Primary District Aim

- Vision: "MASD will be recognized as a model for exemplary instructional practices, active student engagement, and challenging curriculum within a supportive environment that embraces diversity and excellence for future generations. The life-long success of our students will be measured by their ability to live as productive, responsible, moral, and ethical citizens" (McKeesport Area SD: District Level Plan, 2013)
- Mission: "The Sto-Rox School District mission is to empower all students to ethically meet the challenges of a global society, to become self-directed continuous learners, and to ensure in a partnership with the community that a comprehensive educational program and support services will be provided to meet the diverse needs of all students, thus enabling them to become accountable citizens and to reach their potential" (Sto-Rox School District: Academic Standards and Assessment Report, 2009)
- Mission: "The mission of the South Fayette School District, in partnership with the community, is to cultivate academic, artistic, and athletic excellence by instilling a spirit of collaboration and communication to develop confident, ethical and responsible leaders" (South Fayette School District, 2014)

Emphasis Placed on Care

- Mission: "The mission of the North Hills School District is to excel at educating and preparing each student to become a responsible, contributing member of

society by providing a caring and an academically challenging environment" (North Hills School District, 2014)

- Vision: "The West Allegheny School District will create a learning environment in which students maximize their potential and achieve success in a cooperative partnership with students, parents, staff, administration, and community through a positive, supportive, caring climate which promote the dignity of all individuals" (West Allegheny SD: District Level Plan, 2013)

Emphasis Placed on Values

- Values (one of seven values): "Respect, Honesty, and Integrity" (Mt. Lebanon School District, 2014)
- Beliefs (one of eight beliefs): "Effective schools are built upon integrity and foster respectful, inclusive, and dynamic environments" (Fox Chapel Area School District, 2014)
- Vision: "The vision of the Penn Hills School District is to engage our entire community to inspire individual students to their highest levels of reading and academic achievement while instilling a commitment to service, respect, and life-long learning" (Penn Hills School District, 2014)

Appendix B: University Course Descriptions

Duquesne University (2014)

Ethics, Education, and the Teaching Profession (LTFL 102, 3 credits). Introduces the theory and practice of ethics, focusing on applications in education and especially in the profession of teaching. Students will learn about ethics, will practice using "moral languages," and will examine moral issues using case studies drawn from teaching practices and the profession. LTFL 102 has been approved by the UCOR committee for fulfilling the ethics requirement of the university core; it is required of all education majors. Lecture.

Social Justice in Educational Settings (LTFL 204, 3 credits). This course will focus on the role of social justice in educating a diverse student population. Social justice discourse is introduced as an educational tool that can be used to better understand the correlations between organizational, institutional, and/or social conditions and the widespread inequities in areas of, but not limited to, race, culture, class, and gender that challenge the educational system. This course is required of all education majors. Lecture, Theme Area Social Justice.

Teaching Social Studies in Grades 4-8 (LTML 325, 3 credits). This course examines the theories, practices, content, and resources for the teaching and learning of social studies in grades 4 through 8. It encourages students to articulate and enact a set of ideas and practices for helping young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. This is accomplished via curricular and pedagogical decision-making exercises addressing various geographical, social, political, and

economic dimensions of global citizenship, with emphasis placed on how these dimensions can be framed and understood within the Spiritan Tradition of Caring. Prerequisites/Enrollment Limits: Students will have to be admitted to the Professional Educator Certification Track prior to being allowed to enroll in any 300 level courses in the Leading Teacher Program. Co-requisites for the course: LTML 314, 394, 395; LTSP 301; LTFL 326 Lecture.

Penn State University Bulletin (2014)

Education, Schooling, and Values (EDTHP 441, 3 credits). Studies in education and schooling as problems in value; axiological problems and positions; examination of practical applications, including moral education.

Chatham University (2013)

Child Development: Birth through grade 4 (EDC 105, 3 credits). This course addresses physical, social, cognitivie (sic), and moral development from prenatal stages through middle childhood (sic). Students examine child development in teh (sic) context of social, cultural, instructional settings. Using case studies, the implications of growth and development on instructional planning for effective learning is achieved. Students learn to create environments that are healthy, respectful, supportive and challengin (sic) for all children.

Adolescent Development (EDU 109, 3 credits). This course addresses physical, social, cognitive, and moral development during adolescence. The physical, social, and cognitive changes during puberty are explored in terms of their impact on student participation and performance in school settings. Through the use of case studies, an understanding of the implications of growth and development on instructional planning

for effective learning is achieved.

Robert Morris (2014)

Educational Psychology / Classroom Management (EDUC2100, 3 credits). This course is designed to help pre-service teachers understand human development (physical, cognitive, social, personal, moral) in relation to learning and teaching including classroom management, special education, cultural differences, learning styles, multiple intelligences, and ELL. The course also stresses the application of contemporary learning theory through discussion, projects, and case studies that serve both the goal of promoting content expertise as well as various aspects of literacy.

Waynesburg University (2014)

Introduction to Early Childhood (ECE 105, 3 credits). This course is designed as a beginning exploration into the study of early childhood education. Students are introduced to all areas of child development: physical, cognitive, social, emotional, and moral. The contexts of family, culture, and community are emphasized. Other topics in the course include: environmental design, learning and developmental theories, curricular approaches, assessment, pedagogical orientations, and ethics. This class requires a field experience.

Appendix C: **Sample Course Syllabus**

Since few districts have the internal capacity to deliver professional development related to moral education, a recommended outcome of the workshop is that moral education be integrated into pre-service curriculum. Below is an outline of a syllabus for a semester long course that was developed following the professional development workshop described above. No textbook appropriate for such a course exists, so articles and book chapters that could be used have been included.

Course description: *Moral education*. In this course, students will examine research and literature related to moral development and moral education. Students will consider these topics from multiple perspectives (i.e., philosophical, historical, socio-cultural, economic, and psychological). Students will also examine the neuroscience behind moral decision-making. Emphasis will be placed on instructional strategies that will prepare teachers to both advance their students' moral reasoning and elevate their empathetic dispositions.

Prerequisites: Child development, psychology.

Course Objectives:

General Objective. Students will be able to integrate moral education into curriculum and instruction in order to advance their students' moral development.

Specific Objectives. Students will be able to

a) assess their class's stage of moral development and integrate Socratic questioning into instruction;
b) establish a caring classroom environment by modeling caring and responding appropriately to immoral conduct;

c) incorporate age-appropriate service learning projects into the curriculum;

d) identify how gender, traumatic brain injury, giftedness, and ADHD and mild learning disabilities may impact a student's moral development; and

e) explain, in an age-appropriate way, how situational factors can influence moral decision making.

Course Requirements:

Papers. Typed, double-spaced, and generally between 2 – 3 pages.

Class Work. Journal responses, attendance, participation.

Exams. Midterm and final.

Course Calendar:

Week one—Big picture. There will be an overview of what will be covered in the course. Students will reflect on why moral education matters and discuss the moral education they received while in K-12 schools. Paper: Autobiography (due week two). Readings:

- Rosenstand, Nina. *The Moral of the Story: An Introduction to Ethics*. London and Toronto: McGraw Hill, Fifth Edition, 2006. Chapters 1 and 2.

Week two—Moral education from multiple perspectives. Students will consider moral education from a number of different perspectives: Philosophical, historical, socio-cultural, economic, and psychological. Paper: Students will choose one of these perspectives to explore in greater depth (due week three). Readings:

- McClellan, B. E. (1992). *Schools and the shaping of character: Moral education in America, 1607-present*. Bloomington, IN: Social Studies

Development Center, & ERIC Clearinghouse for Social Studies/Social Science Education.

Excerpts from:

- Aristotle (trans. 1998). Nicomachean ethics. In L. P. Pojman (Ed.), *Classics of Philosophy* (pp. 289-320). New York, NY: Oxford University Press.
- Kant, I., & Gregor, M. J. (1998). *Groundwork of the metaphysics of morals*. Cambridge, U.K.: Cambridge University Press.
- Mill (1861/1998). Utilitarianism. In L. P. Pojman (Ed.), *Classics of Philosophy* (pp. 914-944). New York, NY: Oxford University Press.

Week three—Need. Students will consider the purpose of education, different forms of development (i.e., social, emotional, cognitive, moral, and physical), and the reasons for bringing moral education into classrooms and schools. Assignment: Students will rank the different forms of development in order of importance in life, and defend this ordering (due week four). Readings: Students will find and examine the strategic statements from five school districts they would like to work for.

Week four—Neuroscience. Students will learn about plasticity and the science behind moral decision-making. Special emphasis will be placed on dual process theory. Students will also consider the importance of efficacy and self-efficacy. Assignment: Students will write an essay making connections between plasticity, dual process theory, efficacy, and self-efficacy (due week five). Readings:

- JohnBull, R. M., Hardiman, M., & Rinne, L. (2013, April). Professional development effects on teacher efficacy: Exploring how knowledge of neuro- and cognitive sciences changes beliefs and practices. Paper presented at the

annual meeting of the American Educational Research Association, San Francisco, CA.

- Greene, J. D. (2014). Beyond Point-and-Shoot Morality: Why Cognitive (Neuro)Science Matters for Ethics. *Ethics*,*124*(4), 695-726.

Week five—Special considerations. Students will consider the impact gender, giftedness, ADHD and mild learning disabilities, and traumatic brain injury have, or can potentially have, on moral development. Paper: Students will explore one of these topics in greater depth, focusing on practical classroom implications (due week six). Readings:

- Narvaez, D., & Vaydich, J. L. (2008). Moral development and behavior under the spotlight of the neurobiological sciences. *Journal of Moral Education, 37*(3), 289-312.

Week six—Ethics of principles. Students will consider the stages of moral development. Emphasis will be placed on how to use Socratic questioning to help students advance to the next higher stage. Paper: Using literature appropriate for the grade level or subject they plan to teach (e.g., a picture book or a chapter of a novel or non-fiction text), students will develop a series of questions that could be integrated into a guided reading activity. The questions should be targeted to the stage of moral development expected for most students at that grade level (due week seven). Readings:

- Kohlberg, L., & Peters, R. S. (1975). Cognitive-developmental approach to moral education. *Phi Delta Kappan, 56*, 670-677.

Week seven—Ethics of Care. Students will consider empathetic dispositions, and what can be done to elevate them. Emphasis will be placed on how to model caring. Situational morality and providing students with appropriate feedback when they act

immorally will also be discussed. Paper: Students will write vignettes depicting what a caring classroom environment looks like (due week nine).

- Narvaez, D., & Bock, T. (2014). Developing expertise and moral personalities. In L. Nucci & D. Narvaez (Eds.), *Handbook of Moral and Character Education* (2nd ed.) (pp. 140-158). New York, NY: Routledge.

Week eight—Midterm exam.

Week nine—Practicing caring. Service learning will be discussed. Assignment: Students will design and complete service learning activities. Students will write a paper in which they will make a connection between the service they choose to provide and the content covered in this course. Students will also develop a plan for a service learning project appropriate for the grade level they plan to teach (due week 11). Readings:

- Terry, A. W., & Bohnenberger, J. E. (2004). Blueprint for incorporating service learning: A basic, developmental, K-12 service learning typology. *Journal of Experiential Education*, *27*(1), 15-31.

Week ten—Service learning work-week. Students will work on the paper and project assigned in week nine.

Week eleven—Service learning presentations. Students will present what they did for their service learning project along with the service learning plan they developed for their students.

Week twelve—Reflection. The importance of providing students with time to reflect will be discussed. Reflection will specifically be discussed in relation to previously covered instructional implications. Paper: Students will be asked to write an open-ended reflection on the content covered so far. Readings: TBD.

Week thirteen—Application. Students will develop a plan for how they will integrate moral education into curriculum and instruction.

Week fourteen—Work week.

Week fifteen—Presentations of plans.

Week sixteen—Final exam.

Biography

Tom Shaughnessy is the principal of Park Elementary School and the manager of special projects for the Steel Valley School District. He lives in Pittsburgh, Pennsylvania. Tom earned a Bachelors of Science from the U.S. Military Academy, a Masters in Education from the University of Notre Dame, and a Masters in Public Management from Carnegie Mellon University.